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VOLUME 2 - APPENDIX A

ELECTRICAL EVALUATION OF RCA MWS5001D RANDOM ACCESS MEMORY

(NASA-CR-162262) ELECTRICAL EVALUATION OF RCA MWS5501D RANDOM ACCESS MEMORY, VOLUME 2, APPENDIX A Final Report (Hughes Aircraft Co.) 178 p HC A09/MF A01 CSCL 09B

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JUNE 1979

AEROSPACE GROUPS

HUGHES

HUGHES AIRCRAFT COMPANY CULVER CITY, CALIFORNIA



ELECTRICAL EVALUATION OF RCA MWS5501D RANDOM ACCESS MEMORY

Volume 2 FINAL REPORT JUNE 1979

(Appendix A)
Contract Number JPL 954789

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Electro-Optical and Data Systems Groups

AEROSPACE GROUPS

Hughes Aircraft Company • Culver City, California

APPENDIX A CHARACTERIZATION DATA

PATTERN SELECTION DATA

ADDRESS	ACCESS	i flat	E RCA	MwS50010	12 SEP 7	7 SN:	1
TEMP=	25						
	۷CC	=	4.5V		5.0V		5.5V
GALPAT *ALK SKIP CHECKI SCAN DIAGI DIAG2			165.N 130.N 160.N 115.N 50.ON 130.N		130.N 110.N 125.N 95.ON 50.ON 105.N 125.N		110.N 95.0N 105.N 90.0N 50.0N 95.0N 105.N
TEMP=	- 55						
	VCC	=	4.5V		5.UV		5.51
GALPAT WALK SKIP CHECK1 SCAN DIAG1 DIAG2 DIAG3			190.N 150.N 185.N 140.N 50.ON 160.N 175.N		130.N 110.N 125.N 100.N 50.0N 110.N 125.N 50.0N		100.N 90.UN 100.N 80.ON 50.UN 90.ON 100.N 50.UN
TEMP=	125						
	VCC	=	4.5V		5.0V		5.5V
GALPAT WALK SKIP CHECK1 SCAN DIAG1 DIAG2 DIAG3			165.N 195.N 170.N 145.N 50.ON 190.N 190.N		140.N 170.N 140.N 130.N 50.ON 170.N 105.N		125.N 155.N 125.N 120.N 50.ON 155.N 150.N 50.ON

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DATA SET	ue ti	МĖ	RCA MWS5001D	12 SEP 77 SN:	1
TEMP=	25				
	vCC	=	4.5 V	5.00	5.5v
GALPAT WALK SKIP CHECK1 SCAN DIAG1 DIAG2			12.0N 12.0N 12.0N 18.0N 18.0N 12.0N	10.0N 10.0N 12.0N 16.0N 14.0N 10.0N	8.00N 8.00N 10.0N 14.0N 12.0N 8.00N
TEMP=	-55				
	vCC	=	4.5V	5.0V	5.5V
GALPAT WALK SK1P CHECK1 SCAN DIAG1 DIAG2 DIAG3			12.0N 14.0N 14.0N 16.0N 16.0N 12.0N 0.00	10.0N 10.0N 12.0N 14.0N 12.0N 8.00N 8.00N	8.00N 8.00N 10.0N 12.0N 12.0N 5.00N 6.00N
TEMP=	125				
	VCC	75	4.5V	5 • 0 v	5.5V
GALPAT WALK SKIP CHECKI SCAN DIAGI DIAGI DIAG2 DIAG3			14.0N 14.0N 14.0N 18.0N 18.0N 14.0N 14.0N	12.0N 12.0N 12.0N 16.0N 16.0N 12.0N 12.0N	12.0N 12.0N 12.0N 14.0N 14.0N 12.0N 12.0N 0.00

DATA HUI	M11 G.	E	RCA MW85001D	12 SEP 77	Sie: 1
TEMP=	25				
	VCC.	=	4.5 V	5.0V	5.51
GALPAT			14.UN	18.08	20.UN
WALK			14. Uiv	18.0W	16.0N
SKIP			14.0w	16.0N	1 b . O N
CHŁCK1			12.0N	14.0N	14.UN
SCAN			1 U . U N	12.0N	14.0N
DIAG1			14 . U N	16.0W	18.01
DIAG2			14.0N	16.0N	18.0N
TEMP=	- 55				
	vCC	=	4 • 5 v	5.0V	5.51
GALPAT			14.0N	16.0N	18.0N
WALK			14.0N	16.0N	18.0%
SKIP			14.UN	16.0N	18.0N
CHECKI			10.0N	12.0N	14.0N
SCAN			10.0N	12.0N	14.UN
D1AG1			14.0%	14.0N	18.UN
D1AG2			14.0№	14.04	18.0N
DIAG3			U. UO	0.00	0.00
TEMP=	125				
	vCC	=	4.5V	5.0 V	5.5V
GALPAT			10.00	18.0M	22.0h
WALK			16.0N	18.0N	22.UN
SKIP			16.UN	18.0N	22.0N
CHECKI			12.UN	14.UN	18.0N
SCAN			12.0N	14.0N	16.0N
DIAGI			16.0N	18.00	20.0N
DIAG2			16.0N	18.0N	20.UN
DIAG3			0.00	0.00	0.00

OF ROOF COALTY'S

wRITE PU	≀ಓՏԸ w	1014	RCA MWS5001D	12 SEP 77	Sn: 1
TEMP=	25				
	VCC	=	4.5V	5.04	5.54
GALPAT			48.0N	44.0N	40.0N
WALK			48.0N	44.0N	40.01
SKIP			48.0w	44.0N	40.0N
CHECKI			48.0N	44.0N	40.8E
SCAN			46.0m	42.UN	38-00
DIAG1			48.0N	44.UN	40.0N
D1AG2			48 • O iv	44.0N	40.0N
TEMP=	- 55				
	VCC	Z	4.5V	5 • 0 V	5.5V
GALPAT			42.0N	38.0N	36.UN
WALK			44.0N	38.0W	36.0N
SKIP			44.0N	40.0N	36.0N
CHECKI			46.UN	38.0N	34.0N
SCAN			42.UN	38.0N	34.UN
DIAGI			50.014	44.UN	40.0N
DIAG2			50.0N	44.ÚN	40.0N
DIAG3			20.0N	20.0N	20.0N
TEMP=	125				
	VCC	=	4.5V	5.0V	5.50 .
GALPAT			62.0N	56.UN	54.0N
WALK			62.0N	50.0N	54.0N
SKIP			54.0N	58.0M	54.0N
CHECK1			60.0N	54.UN	48.UN
SCAN			62.0N	56.0N	52.0N
DIAGI			62.0N	54.UN	50.0N
DIAGZ			62.UN	54.0N	50.0N
D1AG3			20 • ON	20.04	20.0N

ADDRESS	SETUP	TIME	HCA M#85001D	12 SEP 7/ SN:	1
TEMP=	25				
	vcc	=	4.5V	5.UV	5.54
GALPAT			12.UN	12.0N	12.0N
WALK			12.0%	12.0N	12.0N
SNIP			12.00	10.0N	12.UN
CHECK1			24.UN	18.0N	18.0N
SÇAN			10.00	10.0N	10.0N
DIAG1			20.0N	16.0N	16.0%
D1AG2			20.UN	16.0N	16.0N
TEMP=	-55				
	vCC	=	4.5V	5.0 V	5.50
GALPAT			10.0N	10.0N	10.0N
WALK			10.0N	10.0N	10.0N
SKIP			10.0N	10.0N	10.UN
CHECK1			J o. oE	22.UN	18.00
SCAN			10.0N	10.0N	10.0N
DIAGI			26.0N	18.0N	16.0N
DIAG2			26.0N	18.0N	16.UN
DIAG3			10.UN	10.0N	10.0N
TEMP=	125				
	vCC	=	4.5V	5.0V .	5.5V
GALPAT			10.0N	10.0N	12.0N
WALK			10.0N	10.GN	12.0N
SKIP			10.0N	10.0N	10.0N
CHECKI			32.UN	30.0N	28.UN
SCAN			10.04	10.0N	10.0N
DIAGI			28 - 0 N	24.0N	24.UN
D1AG2			58.0M	24.0N	24.UN
DIAG3			10.00	10.0N	10.0N

ADDRESS	HOPD	TIME	нса	Mw55001D	12 SEP	77 SN:	1
[EMP=	25						
	vCC	=	4.50	Ę	.0V		5.50
GALPAT			-10.0N		0.00N		-2.00N
WALK			-10.0N		400 · c		-2.00N
Skip			-8.00W		0.00N		-2.UUN
CHECKI			-10.0m		000 c		-4.00N
SCAN			-18.0W	· -	19.0N		-20.0N
blAG1			-10.0N		6.00N		-4.00N
DIAG2			-10.0N	- 6	5.00N		-4.00N
TEMP=	→ 55						
	VCC	=	4.5V	5	5.0V		5.50
GALPAT			-8.00W		0.00M		-2.60N
MALK			-10.0W		. UON		-2.00N
SKIP			-10.0W		.004		-2.00N
CHECKI			-10.0N		00N		-2.00N
SCAN			-18.0N		50.0M		-20.0N
DIAGI			-10.0N		- UUN		-4.00N
DIAG2			-10.0N		0.00N		-4.00N
DIAG3			-20.0N	= 2	20 • 0 in		-20.0N
TEMP=	125						
	vcc	=	4.5V	2	5.0V		5.3V
GALPAT			-12.0N		3 . 00 iv		-4.00N
WALK			-12.0N		4.00%		-4.00N
SKIP			-12.0N		. O O N		-6.00N
CHECK1			-14.0N		10.0N		-6.0UN
SCAN			-19.0W		18.0N		-18.0N
DIAGI			-12.UN		3.00N		-6.00N
DIAG2			-12.0N		3.00N		-6.00iv
DIAGB			-20.0N	- 4	10.0N		-20.0N

CE TO WE	cire t	Ine	KCA M#S5001D	12 SEP 77	5N: 1
TEMP=	25				
	VCC	=	4.5∀	5.00	5.50
GALPAT			46.UN	42.UN	38.0N
WALK			46.04	42.00	30.UN
SKIP			40.0N	2.0N	38.0N
CHECKI			46.0N	40.0N	36.UN
SCAN			44.0N	40.0N	34.UN
DIAGI			50.0N	44.0N	36.UN
DIAG2			50.0N	44.UN	30.01
TEMP=	-55				
	vCC	=	4.5V	5.0v	5.51
GALPAT			40.0N	30.00	32.0N
WALK			42.0N	36.0N	32.UN
SKIP			42.0N	36.UN	32.UN
CHECKI			44.0N	38.0N	32.UN
SCAN			40.0W	34.UN	30.UN
DIAGI			46.0N	42.0N	36.0N
DIAGZ			46.0N	42.UN	36.UN
DIAGE			0.00	0.00	0.00
TEMP#	125				
	VCC	=	4.5 v	5.0V	5.5v
GALPAT			60.0N	54.0N	50.0N
NALK			50.9N	54.0N	48.0N
SKIP			62.UN	50.0N	50.0N
CHECKI			58.0N	52.0N	46.UN
SCAN			56.UN	50.UN	46.UN
DIAGI			58.0N	52.0N	48.0N
DIAG2			58.00	52.0N	48.UN
U1AG3			0.00	0.00	0.00

ADDRESS	ACCESS	3K11 6	HCA MWS50	010 12 SEP 77	Sn: 2
TEMP=	25				
	vcc	= 4.5	d	5.0 V	5.50
GALPAT		145	. iV	115.N	100.N
WALK		120	. N	100.N	95.0N
SKIP		140	e N	115.N	100.N
CHECKI		105	■ 1 ¥	90.0N	80.0N
SCAN		50.	U N	50.0N	50.0N
DIAGI		120	• N	100.N	90.0N
DIAG2		140	. N	115.N	1.001
TEMP=	-55				
	vcc	= 4.5	V	5 . 0 v	5.5v
GALPAT		150	. N	110.N	90.0N
WALK		120	. N	95.UN	85.0W
SKIP		145		110.N	90.0N
CHECK1		100		80.0N	70.0N
SCAN		50.		:50.0N	50.0N
DIAGI		115		95.UN	80.0N
DIAG2		135		105.N	90.0N
DIAG3		50.	0 N	50.0W	50.0w
TEMP=	125				
	VCC	= 4.5	٧	5.UV	5.51
GALPAT		160	• N	135.8	125.N
WALK		185	• 14	165.N	150.N
SKIP		160	. N	135.N	125.N
CHECK1		135	. iV	120 . W	110.N
SCAN		5U.	ON	50.0N	50.0N
DIAGI		185	, N	165.N	150.N
D1AG2		180	• N	160 . N	145.N
D1AG3		50.	0 N	50.0N	50.UN

DATA SET	INS TIME	, HCA MW55001E	12 SEP 11	SN: 2
TEMP=	25			
	vCC =	4.50	5.UV	5.5V
GALPAT		10.UN	10.0N	10.0N
WALK		12.0N	10.0W	10.0N
SKIP		12.0N	10.0N	10.UN
CHECKI		14.0N	14.UN	12.0N
SCAN		14.0N	14.0N	12.UN
DIAGI		10.UN	10.6N	10.0N
DIAGZ		10.0N	10.0N	10.0N
TEMP=	-55			
	VCC =	: 4.5V	5.0 V	5.5V
GALPAT		10.0N	8.UON	8.00N
WALK		10.UN	8.00N	8.00N
SNIP		10.0a	10.UN	8.00%
CHECK1		12.0N	10.0N	10.00
SCAN		12.0N	10.UN	10.0N
DIAGI		8.00N	8.00N	8.00N
DIAG2		8.00N	8.004	6.00N
DIAG3		U.00	0.00	0.00
TEMP=	125			
	vcc =	= 4.5V	5.0 v	5.5V
GALPAT		12.UN	12.0N	12.0 iv
WALK		12.0N	12.0N	12.0N
SKIP		14.0N	12.0N	12.0N
CHECK1		16.0N	14.0N	14.0N
SCAN		14.UN	14.0N	12.UN
DIAG1		14.00	12.0N	12.0N
D1AG2		14.0N	12.UN	12.0N
DIAG3		0.00	0.00	0.00

DATA HUI	iD ITM	L	RCA MWS5001D	12 SEP 77 SN:	2
TEMP=	25				
	vCC	=	4.5 V	5.0v	5.5V
GALPAT			20.0N	22.UN	24.UN
WALK			20.0N	22.0N	24.0N
SKIP			18.0N	20.0N	22.UN
CHECK1			14.0N	16.UN	18.0N
SCAN			12.0N	14.0N	16.UN
DIAG1			18.0w	20.0N	22.0N
DIAG2			18.0N	20.0N	22.0N
TEMP=	-55				
	vCC	=	4.5 V	5.0V	5.5V
GALPAT			18.0%	20.UN	22.0N
WALK			18.0N	20.0%	22.0N
SKIP			18.0N	20.UN	22.00
CHECK1			14.0N	16.UN	18.0N
SCAN			12.0N	14.0N	16.0N
DIAGI			18.6N	20.0N	20.0N
DIAG2			18.00	20.0N	20.0N
DIAG3			0.0 0	0.00	0.00
1EMP=	125		•		
	۷CÇ	=	4.5V	5.00	5.5V
GALPAT			20.0N	24.0N	26.0N
WALK			20.0W	24.0N	26.UN
SKIP			20.0N	24.0N	26.0%
CHECK1			16.ÚN	18.0N	22.0N
SCAN			14.0N	16. ÙN	18.00
DIAGI			20.UN	22.UN	26.0N
DIAG2			20.0A	22.0w	26.0N
DIAG3			U.00	0.00	0.00

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WRITE PO	ippe w	191н	RCA MwS5001D	12 SEP 77	5N: 2
TEMP=	25		•		
	VCC	=	4.5 v	5.0V	5.50
GALPAT			48.0N	46.0N	44.0N
WALK			48.UN	46.0N	42.0N
SKIP			48.0N	46.0N	44.UN
CHECKI			48.UN	46.UN	42.0N
SÇAN			48.00	44.0iv	40.0iv
DIAG1			48.00	46.UN	42.UN
DIAG2			48.0N	46.0N	42.0N
TEMP=	-55				
	vec	=	4.5V	5.0V	5.54
GALPA1			44.0fu	40.0N	38.0N
WALK			44.UN	40.UN	38.0W
Sk 1P			44.0N	40.UN	38.01√
CHECKI			44.0N	38.UN	38.01
SCAN			40.0N	38.0N	36.0N
DIAGI			48.UN	44.UN	38.0N
DIAG2			48.0N	44.0N	40.8F
PIAGS			20.0N	20.0N	20.00
TEMP=	125				
	vCC	=	4.5 V	5.0V	5.5V
GALPAT			02.UN	58.0N	54.UN
WALK			64.UN	60.0M	50.0N
SKIP			64.0N	62.0N	56.UN
CHECK1			62.0N	56.UN	54.0N
SCAN			64.00	60.0N	56.UN
DIAG1			62.0N	56.00	54.UN
DIAG2			02.UN	58.00	54.0N
DIAGS			20.0N	20.0N	20.01

REPORTED TO

ADDRESS	SETUP	LIME	RCA MWS5001D	12 SEP 77 SN:	2
TEMP=	25				
	vcc	=	4.5V	5.0V	5.5V
GALPAT			10.00	10.0N	10.0N
*ALK			10.04	10.0M	10.0N
SKIP			10.00	10.0N	10.08
CHECK1			22.0%	18.00	Ib.UN
SCAN			10.0N	10.0N	10.UN
DIAGI			18.00	16.0N	16.UN
D1AG2			18.00	16.0N	16.0N
TEMP=	-55				
	vcc	=	4.5V	5.00	5.5V
GALPAI			10.0m	10.00	10.0N
WALK			10.00	10.00	10.0N
SKIP			10.00	10.UN	10.0N
CHECK 1			26.0N	20.UN	16.0N
SCAN			10.6N	10.0N	10.0N
DIAGI			20.0N	16.0N	16.UN
DIAG2			20.01	16.UN	16.UN
DIAGS			10.00	10.0N	10.0N
TEMP=	125				
	vCC	=	4.5V	5.00	5.50
GALPAT			10.0N	10.0N	10.0N
WALK			10.JN	10.0N	10.0N
SKIP			10.0N	10.0N	10.0N
CHECK1			30.0N	26.0N	26.0N
SCAN			10.0N	10.0N	10.UN
DIAGI			30.0n	28.0N	26.UN
DIAGE			30.0N	28.UN	26.UN
DIAG3			10.08	10.0N	10.UN

TEMP= 25 VCC = 4.5v	. 4.39 	ADDRESS	ного	LIME	RCA	MWS5001D 12 SEP 77	SN: 2
VCC = 4.5V	<u> </u>						
GALPAT -0.00N -4.00N -2.00N SAIP -0.00N -4.00N -2.00N SAIP -0.00N -4.00N -2.00N SCAN -18.0N -20.0N -2.00N DIAGI -0.00N -4.00N -2.00N DIAGZ -0.00N -4.00N -2.00N STEMP= -55 VCC = 4.5V 5.0V 5.5V GALPAT -0.00N -4.00N -2.00N SAIP -0.00N -4.00N 0.00 CHECKI -0.00N -4.00N 0.00 CHECKI -0.00N -4.00N 0.00 DIAGI -0.00N -4.00N 0.00 TEMP= 125 VCC = 4.5V 5.0V 5.5V		TEMP=	25				
MALA -0.00N -4.00N -2.00N Ship -0.00N -4.00N -2.00N SCAN -18.00 -20.0N -2.00N DIAGI -0.00N -4.00N -2.00N TEMP= -55 VCC = 4.5V 5.0V 5.5V GALPAT -0.00N -2.00N -2.00N Ship -0.00N -4.00N 0.00 CHECRI -0.00N -4.00N 0.00 CHECRI -0.00N -4.00N 0.00 DIAGI -0.00N -4.00N 0.00 SCAN -18.0N -20.0N -20.0N DIAGI -0.00N -4.00N 0.00 DIAGI -10.0N -6.00N -4.00N SKIP -10.0N -6.00N -4.00N SCAN -18.0N -18.0N -18.0N -18.0N DIAGI -10.0N -6.00N -4.00N	. (~		VCC	=	4.5 v	5. Ü v	5.50
MALA -0.00N -4.00N -2.00N Ship -0.00N -4.00N -2.00N SCAN -18.0N -2.00N -4.00N -2.00N DIAGI -0.00N -4.00N -2.00N TEMP= -55 VCC = 4.5V 5.0V 5.5V GALPAT -0.00N -4.00N -2.00N Ship -0.00N -4.00N 0.00 CHECRI -0.00N -4.00N 0.00 CHECRI -0.00N -4.00N 0.00 DIAGI -10.0N -6.00N -4.00N SKIP -10.0N -6.00N -4.00N SKIP -10.0N -6.00N -4.00N DIAGI -10.0N -6.00N -4.00N -4.00		CALDAT			-5 UON	•4 . OOM	= 2 . 0 trN
SRIP							
SCAN -18.UN -20.UN -20.UN -2.UUN -2.U	\ \frac{7}{2}						-2.00N
DIAGI DIAG2 -0.00N -4.00N -2.00N -2.00N TEMP= -95 VCC = 4.5V S.0V S.5V GALPAT -0.00N -2.00N	; l.						
TEMP							
TEMP= -55 VCC = 4.5V							
VCC = 4.5v 5.0v 5.5v	1.6	•					
VCC = 4.5v 5.0v 5.5v	1						
GALPAT -0.00N -2.00N 0.00 WALK -0.00N -2.00N 0.00 SNIP -0.00N -4.00N 0.00 CHECK1 -0.00N -4.00N 0.00 DIAG1 -0.00N -4.00N 0.00 DIAG2 -0.00N -4.00N 0.00 DIAG3 -20.0N -20.0N -20.0N TEMP= 125 VCC = 4.5V 5.0V 5.5V GALPAI -10.0N -0.00N -4.00N SNIP -10.0N -0.00N -4.00N SNIP -10.0N -0.00N -4.00N CHECK1 -10.0N -6.00N -4.00N UTAG1 -10.0N -6.00N -4.00N DIAG2 -10.0N -6.00N -4.00N DIAG2 -10.0N -0.00N -4.00N DIAG3 -20.0N -20.0N -20.0N	(,	TEMP=	-55				
GALPAT -0.00N -2.00N 0.00 WALK -0.00N -2.00N 0.00 SNIP -0.00N -4.00N 0.00 CHECK1 -0.00N -4.00N 0.00 DIAG1 -0.00N -4.00N 0.00 DIAG2 -0.00N -4.00N 0.00 DIAG3 -20.0N -20.0N -20.0N TEMP= 125 VCC = 4.5V 5.0V 5.5V GALPAI -10.0N -0.00N -4.00N SNIP -10.0N -0.00N -4.00N SNIP -10.0N -0.00N -4.00N CHECK1 -10.0N -6.00N -4.00N UTAG1 -10.0N -6.00N -4.00N DIAG2 -10.0N -6.00N -4.00N DIAG2 -10.0N -0.00N -4.00N DIAG3 -20.0N -20.0N -20.0N	·						
GALPAT -0.00N -2.00N 0.00 WALK -0.00N -2.00N 0.00 SNIP -0.00N -4.00N 0.00 CHECK1 -0.00N -4.00N 0.00 DIAG1 -0.00N -4.00N 0.00 DIAG2 -0.00N -4.00N 0.00 DIAG3 -20.0N -20.0N -20.0N TEMP= 125 VCC = 4.5V 5.0V 5.5V GALPAI -10.0N -0.00N -4.00N SNIP -10.0N -0.00N -4.00N SNIP -10.0N -0.00N -4.00N CHECK1 -10.0N -6.00N -4.00N UTAG1 -10.0N -6.00N -4.00N DIAG2 -10.0N -6.00N -4.00N DIAG2 -10.0N -0.00N -4.00N DIAG3 -20.0N -20.0N -20.0N			۷ÇC	=	4.5 v	5.0V	5.51
WALK SNIP -0.00N -4.00N -4.00N -4.00N -0.00 SCAN -18.0N -20.0N TEMP= 125 VCC = 4.5V 5.0V 5.5V GALPAI -10.0N -6.00N -4.00N SNIP -10.0N -6.00N -4.00N -4.00N SCAN -18.0N -18.0N -18.0N -18.0N -18.0N -18.0N -18.0N -18.0N -18.0N -20.0N)	GALPAT			-6.00N	-2.00N/	0.06
CHECK1 -0.00N -4.00N -20.0N SCAN -18.0N -20.0N -20.0N DIAG1 -0.00N -4.00N 0.00 DIAG2 -0.00N -4.00N 0.00 DIAG3 -20.0N -20.0N -20.0N TEMP= 125 VCC = 4.5V 5.0V 5.5V GALPA1 -10.0N -0.00N -4.00N SK1P -10.0N -0.00N -4.00N CHECK1 -10.0N -6.00N -4.00N DIAG1 -10.0N -18.0N -18.0N -18.0N DIAG2 -10.0N -0.00N -4.00N DIAG3 -20.0N -20.0N -20.0N	1	WALK			-6.00%	-2.00N	0.00
SCAN							
DIAG1	1						
DIAG2 DIAG3 -20.0N -20.0N -20.0N TEMP= 125 VCC = 4.5V GALPAI -10.0N -6.00N -4.00N SK1P -10.0N -6.00N -4.00N SCAN -18.0N -18.0N -18.0N -18.0N -18.0N -18.0N -18.0N -18.0N -4.00N							
DIAG3 -20.0N -20.0N -20.0N TEMP= 125 VCC = 4.5V							
TEMP= 125 VCC = 4.5V							
TEMP= 125 VCC = 4.5V							
VCC = 4.5V 5.0V 5.5V GALPAI -10.0N -6.00N -4.00N SKIP -10.0N -6.00N -4.00N CHECKI -10.0N -6.00N -4.00N SCAN -18.0N -18.0N -18.0N DIAGI -10.0N -6.00N -4.00N DIAG2 -10.0N -6.00N -4.00N DIAG3 -20.0N -20.0N	٠,	TEMP=	125				
GALPAI -10.00 -6.000 -4.000 SK1P -10.00 -6.000 -4.000 SCAN -18.00 -18.00 -18.00 DIAG2 -10.00 -6.000 -4.000 DIAG3 -20.00 -20.00 -20.00					_		
WALK			VCC	=	4.5∀	5.04	5.50
SKIP CHECKI -10.0N -6.00N -4.00N SCAN -18.0N -18.0N -18.0N -18.0N -18.0N -4.00N -4.00N DIAG2 -10.0N -5.00N -4.00N -20.0N -20.0N		GALPA1			-10.00	-6.UUN	-4.00N
CHECKI -10.0N -6.00N -4.00N SCAN -18.0N -18.	1						
SCAN -18.0N -18.0N -16.0N -4.0UN DIAG2 -10.0N -6.00N -4.0UN -6.00N -20.0N	1						
DIAG1 -10.0N -6.00N -4.0UN DIAG2 -10.0N -6.00N -4.0UN DIAG3 -20.0N -20.0N -20.0N	. 1.						
D1AG2 -10.0N -6.00N -4.00N -20.0N -20.0N							
		DIAG2			-10.0N	-6.00N	-4.00N
	\;	DIAG3			-20.00	-20.0N	-20.0%
	3 th th						
	L_{z}						
A-15							
A-15	에 출수 : - : - :						
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18 1 10 10 10 10 10 10 10 10 10 10 10 10 1						A STATE OF THE STA	4.4.*

CE IN ME	die T	TWE	RCA MWS5001D	12 SEP 7/	5N: 2
TEMP=	25				
	VCC	=	4.5V	5.UV	5.5V
GALPAT			40.UN	42.0N	40.014
WALK			46.0N	42.0N	40.01
SKIP				42.0N	40.UN
ChECK1			46.UN	42.0N	38.ON
SCAN			44.0%	40.0N	40.0E
DIAGI			50.0N	42.UN	42.0N
D1AG2			50.0N	42.0N	42.0N
TEMP=	-55				
	vCC	=	4.5V	5.0v	5.5V
GALPAT			40.0N	36.00	34.00
WALK			40.0W	38.0N	44.UN
SKIP			40.0n	38.0N	34.0h
CHECKI			42.0N	38.0W	36.01
SCAN			38.0W	34.UN	32.0N
DIAGI			46.UN	42.UN	38.0W
D1AG2			46.0W	42.0N	36.00
DIMG3			0.00	0.00	0.00
1EMP=	125				
	VCC	=	4.54	5.0 %	5.5V
GALPAI			60.UN	5 . UN	52.0N
WALK			60.00	56.UN	50.UN
SKIP			04.UN	58.0N	54.00
CHECKI			00.UN	56.UN	50.UN
SCAN			58.0N	54.0N	48.0N
DIAGI			00.0N	56.00	50.0N
D1AG2			60.04	56.0N	50.0N
DIAG3			0.00	0.00	0.00

ADDRESS	ACCESS	TIME RCA	MWS5001D 12 SEP 77	કેલ્ટ ક
TEMP=	25			
	vCC	= 4.5V	5.0V	5.5V
GALPAT		325.N	225.N	180.N
WALK		210.N	165 . N	135.N
SNIP		305.N	215.N	170.N
CHECKI		150.N	125.N	115.N
SCAN		50.00	50.0N	50.0N
DIAGI		1/5.N	135.N	115.N
DIAG2		210.w	160.N	135.N
TEMP=	-55			
	VCC	= 4.5v	5.UV	5.5v
GALPAT		1.00K	270.N	180.N
WALK		395.N	220.N	160.N
SKIP		1.00n	225 . N	190.iv
CHECK1		175.N	125.N	100.iv
SCAN		50.0N	50.0N	50.0N
DIAGI		210.N	140.N	110.N
D1AG2		230.N	155.N	120.A
DIAGS		50.0N	50.0N	50.0N
TEMP=	125			
	VCC	= 4.5V .	5.0V	5.50
GALPAT		280±W	220.N	190.N
WALK		295.N	255.N	235.N
SKIP		580° N	220.N	190.N
CHECKI		195.N	170.N	155.N
SCAN		50.0N	50.UN	50.UN
DIAGL		260.N	225 . N	205.N
DIAG2		250.N	215.N	195.N
DIAGS		50.UN	50.0N	50.0A

DATA SET	OB II	ME	RCA MWS5001D	12 SEP 77	5N: 3
TEMP=	25				
	vCC	=	4.5v	5.0V	5.5V
GALPAT			16.04	14.0N	14.0N
WALK			16.0N	14.0N	14.UN
SKIP			18.0N	10.0N	14.UN
CHECKI			28.0N	22.0N	20.GN
SCAN			28.0N	22.0N	20.UN
DIAGI			10.00	14.0N	12.0N
DIAGZ			10.UN	14.0m	14.UN
TEMP=	- 55				
	VCC	=	4.5V	5.0V	5.5v
GALPAT			16.UN	14.0N	12.0N
WALK			18.0N	14.0N	12.UN
SKIP			20.0N	16.0N	14.0N
CHECKI			24.0N	16.0N	16.UN
SCAN			22.UN	16.0N	16.0N
DIAGI			16.0N	12.UN	12.0N
D1AG2			10.00	12.0N	12.0N
D1AG3			0.00	0.00	0.00
TEMP=	125				
	VCC	=	4.5V	5.0V	5.5 v
GALPAT			20.UN	18.0N	16.0N
WALK			20.0N	18.UN	10.0%
SKIP			20.0M	18.0N	18.0N
CHECK1			24.00	24.0W	20.0N
SCAN			24.0N	22.0N	20.0N
DIAGI			20.0N	18.0N	16.0N
DIAG2			20.0N	18.UN	16.0N
DIAGE			0.00	0.00	0.00

DATA HUI	PD IIW	Ł	ACA MWS5001D	12 SEP 77 Sa	: 3
TEMP=	25				
	VCC	=	4.5 V	5.0V	5.5V
GALPAT			14.00	16.0N	18.UN
WALK			14.0%	10.UN	18.0W
SKIP			14.00	14.UN	10.UN
CHECK1			10.0N	12.0N	14.0N
SCAN			8.004	10.UN	14.0W
DIAGI			12.0N	14.UN	16.0iv
DIAGZ			12.00	14.0N	18.0V
TEMP=	- 55				
	VCC	=	4.5V	5.0V	5.5V
GALPAT			12.0N	14.0N	16.0N
WALK			12.0A	14.UN	10.UN
SKIP			12.0N	14.0a	16.0N
CHECKI			10.0N	12.0N	12.0N
SCAN			8.00N	10.0N	12.0N
DIAGI			12.0m	14.0N	16.0N
D1AG2			12.0%	14.0W	16.00
EDA1G			0.00	0.00	0.00
TEMP=	125				
	VCC	=	4.5V	50V	5.5V
GALPAT			14.UN	18.0N	20.UN
WALK			14.0W	18.0W	20.0N
SKIP			14.0N	18.0M	20.0N
CHECKI			12.0N	14.0m	16.00
SCAN			10.0N	12.0N	16.0N
DIAGI			14.UN	16.0N	20.0N
DIAGZ			14.0W	16.UN	20.01
DIAGS			0.00	0.00	9.00

WRITE	PULSE	wlDfi	1 RCA MWS500	10 12 SEP 77	Siv: 3
TEMP=	25	•			
	۷۵٥	: =	4.5V	5.UV	5.54
GALPAT	•		56.UN	52.0N	46.0N
WALK			56.0N	52.Um	46.00
SKIP			56.0N	52.0M	46.0N
CHECKI	•		56.UN	52.0N	40.0N
SCAN			56.UN	50.0N	46.UN
DIAGI			56.0N	56.0N	46.UN
D1AG2			60.0N	56.UN	40.ÜN
TEMP=	-5:	•			
	VCC	c =	4.5V	5.0V	5.50
GALPA1	:		48.UN	46.0N	40.0N
WALK			50.0N	46.UN	40.UN
SKIP			52.0N	46.ÛN	40.0w
CHECKI			56.0N	48.0W	40.UN
SCAN			48.UN	44.UN	40.0N
DIAGI			60.0N	50.0N	46.0N
DIAG2			50.0N	50.0m	46.UN
DIAG3			20.0N	20 • ON	20.0N
TEMP=	125	5			
	VCC	; =	4.5V	5.UV	5.5V
GALPAT	l		76.UN	70.0N	62.UN
WALK			78.0N	70.0N	62.0N
SKIP			78.UN	70.UN	64.UN
CHECKI	÷		72.0N	64.UN	58.0N
SCAN			72.0N	66.UN	62.0N
DIAGI			72.0N	64.0N	60.0N
DIAGZ			72.0N	64.0N	60.UN
D1AG3			20.0N	20.0N	20.UN

AUDRESS	SETUP	T1m£	RCA MWS5001U	12 SEP 77 SN:	3
TEMP=	25				
	VCC	=	4.5 4	5.0V	5.57
GALPAT			12.0N	1U.0N	10.0N
WALK			10.0N	10.0N	10.0N
SKIP			10.0%	10.00	10.0%
CHECK1			32.0N .	24.UN	22.UN
SCAN			10.0N	10.0N	10.UN
DIAGI			26.0N	20.0N	20.0N
DIAG2			26.UN	20.0N	20.UN
TEMP=	- 55				
	VCC	=	4.5V	5.UV	5.5v
GALPAT			10.0N	10.0N	10.UN
WALK			10.0N	10.0N	10.0N
SKIP			10.0N	10.0N	10.0N
CHECKI			40.0N	28.0N	22.UN
SCAN			10.0N	10.00	10.00
DIAGI			34.UN	24.UN	18.0N
DIAG2			30.04	22.0%	18.0N
DIAG3			10.0N	10.0N	10.0N
TEMP=	125				
	vad	=	4.54	5.0V	5.57
GALPAT			1.00K	10.0N	10.06
WALK			1.00K	10.UN	10.0N
SKIP			1.00K	10.0N	10.UN
CHECK1			40.0N	38.00	36.UN
SCAN			10.0N	10.0N	10.UN
DIAG1			32.UN	28.0N	28.0N
DIAG2			32.0N	28.0N	28.0N
DIAGS			10.0N	10.0N	10.0N

ADDRESS	ново	FIME	RCA	MWS5001D 12 SEP 7	7 88: 3	
IEMP=	25					
	vCC	=	4.5V	5.0v	5.5V	
GALPAT			-12.0N	-8.00N	-4.00	N
WALK			-12.UN	-8.00N	-4.00	1/4
SKIP			-12.0N	-8.00N	-4.00	
Check1			-14.0N	-10 - 0 N	-0.06	
SCAN			-18.0W	-18.0N	-20.0	
LIAG1			-14.0W	-10.UN	-6.00	
U1AG2			-14.0N	-1 U. UN	~6. 0€) [U
TEMP=	-55					
	vCC	=	4.5 V	5.00	5.5	i
GALPAT			1.00K	+6.0UN	-4.00	N
WALK			1.00%	-o + 0 0 ±	-4.00	
SKIP			1.00K	-8.00M	-4.00	
CHECK1			-12.0N	-8.00N	-4.06	
SCAN			-18.0M	-18.0N	-20.0	
DIAGI			-12.0N	-6.00N	-6.00	
D1AG2			-12.0N	-R.00W	-6.00	
DIAGS			-20.0N	-20.UN	-20.0) [A
1EMP=	125					
	VCC	=	4.5V	5.0V	5.5	1
GALPAT			-16.0N	-12.UN	-8.00	
WALK			-16.0N	-12.0N	-8.00	
SKIP			-16.0N	-12.UN	-a.00	
ChECk1			-18.0W	-14.0N	-10.0	
SCAN			-18.0W	-18.UN	-18.0	
DIAGI			-16.0N	-12.0N	-8.00	
DIAG2			-10.0N	-12.0N	-8.00	
DIAG3			-20.0N	-20.0N	-20.0	N (

CE TO WE	HTE TIME	RCA MWS5001D	12 SEP 77	SN: 3
TEMP=	25			
	vcc =	4.5V	5.0V	5.57
GALPAT		56.UN	50.0N	44.0N
WALL		20.04	50.0N	44.0N
SKIP		56.08	50.0N	44.Uh
CHECK1		56.UN	48.0N	42.0N
SCAN		54.UN	48.0N	42.0N
D1AG1		90.0N	54.0N	48.0N
DIAGS		60.0M	54.0N	48.GN
TEMP=	-55			
	vcc =	4.5 v	5.0 V	5.5V
GALPAT		48.UN	42.0N	38.0W
WALK		50.0N	42.0N	38.ÜW
SKIP		50.0N	44.01	40.8E
CHECKI		52.UN	42.0N	36.UN
SCAN		48.0N	42.0N	36.UN
DIAG1		98.UN	48.0N	44.UN
D1AG2		58.0N	48.UN	44.UN
DIAG3		0.00	0.00	0.00
TEMP=	125			
	vcc =	4.5V	5 0 X	5.5V
GALPAT		74.0N	66.UN	60.0N
WALK		74.UN	66.UN	58.0N
SKIP		76.0N	68.0N	62.0N
CHECK1		/0.0N	62.0N	56.UN
SCAN		70.0N	62.UN	54.UN
DIAGI		70.0N	64.0N	56.00
DIAG2		70.0N	64.0N	56.UN
DIAGS		0.00	0.00	0.00

ADDRESS	ACCESS	TIME	RCA MWS5001D	12 SEP 77	SN: 4
TEMP=	25				
	VCC	= 4.5	•	5.0V	5.57
GALPAT		130.	, N	105.N	95.0N
WALK		120,	, N	100.N	90.UN
SKIP		130,	, N	105.N	95.UN
CHECK1		100.	, N	90.0N	80.0M
SCAN		50.0) N	50.0N	50.0N
DIAGI		115		95.0N	85.UN
DIAG2		125,	. N	105.N	90.0N
TEMP=	- 55				
	VCC	= 4.5	V	5.0V	5.57
GALPAT		125,	. N	95.0N	85.0N
WALK		105	• N	85.0N	75.0N
SKIP		125	. N	95.0N (80.0N
CHECK1		90.0		75.0N	65.0N
SCAN		50.0	0 N	50.0N	50.0N
D1AG1		105		85.0N	70.0N
DIAG2		120.		95.ON	60.0N
D1AG3		50.0) n	50.0N	50.0N
TEMP=	125				
	VCC	= 4.5	V	5.0V	5.5
GALPAT		165.		140.N	125.N
WALK		210.		180.N	165.N
SKIP		170.		145.N	130.N
CHECK1	•	135.		120.N	110.N
SCAN		50.0		50.0N	50.UN
DIAG1		205.		180.N	160.N
DIAG2		210,		180.N	160.N
DIAG3		50.0	D rd	50.0N	50.0N

DATA SET	1T 907	ME	RCA MWS5001D	12 SEP 77 SN:	4
TEMP=	25				
	VCC	=	4.5V	5.07	5.5V
GALPAT			14.0N	12.0N	12.0N
WALK			14.08	12.0N	12.0N
SKIP			14.UN	12.0N	12.0N
CHECKI			20.0N	16.0N	14.0N
SCAN			20.0N	16.0N	14.0N
DIAG1			14.0N	12.UN	12.0N
DIAG2			14.0N	12.0N	12.0N
TEMP=	-55				
	VCC	=	4.5V	5.0V	5.5V
GALPAT			12.0N	12.0N	10.0N
WALK			14.0N	12.0N	10.0N
SNIP			14.0N	12.0N	10.0N
CHECK1			16.0N	12.0N	12.0N
SCAN			16.0N	14.0N	12.0N
DIAGI			14.0N	10.0N	8.00%
DIAG2			14.0N	10.0N	8.0UN
DIAG3			0.00	0.00	0.00
TEMP=	125				
•	VCC	=	4.5V	5.0 v	5.50
GALPAT	***		19.00	16.0N	14.0N
WALK			18.0N	16.0N	16.0N
SKIP			16.UN	16.UN	16.UN
CHECKI			22.0N	20.0N	18.0N
SCAN			18.0N	16.0N	14.0N
DIAGI			18.0N	16.0N	14.0N
D1AG2			18.0N	16.0N	14.0N
DIAGB			0.00	0.00	0.00

DATA HOL	MIT O	E	RCA MWS5001D	12 SEP 77	SN: 4
TEMP=	25				
	VCC	=	4.5 V	5.00	5.50
GALPAT			12.0N	14.0N	16.0N
WALK			12.0N	14.0N	14.0N
SKIP			12.0N	14.0N	14.04
CHECK1			8.00N	10.0N	12.0N
SCAN			A-00N	10.0N	12.UN
DIAGI			10.0N	12.0N	14.0N
UIAG2			10.0N	12.0N	14.0N
TEMP=	-55				
	VCC	=	4.5 V	5.0V	5.5v
GALPAT			12.0N	12.0N	14.0 N
WALK			12.0N	12.0N	14.0N
SKIP			10.0N	12.0N	14.0N
CHECK1			8.00N	10.0N	12.0N
SCAN			8.00N	10.0N	10.0N
DIAG1			10.00	12.0N	12.0N
DIAG2			10.0N	12.0N	12.0N
D1AG3			0.00	0.00	0.00
TEMP=	125				
	VCC	=	4.5.7	5.0V	5.50
GALPAT			14.0N	14.0N	18.0N
WALK			14.0N	14.0N	18.0N
SKIP			12.0N	14.0N	18.0N
CHECK1			10.04	12.0N	14.0N
SCAN			8.00N	10.0N	12.0N
DIAG1			12.0N	14.0N	16.0N
DIAG2			12.0N	14.0N	16.0N
DIAGS			0.00	0.00	0.00

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WAITE PU)LSE w	HIGI	RCA MWS5001D	12 SEP 77	SN: 4
TEMP=	25				
	VCC	=	4.5V	5.0V	5.5V
GALPAT			50.0N	46.UN	42.0N
WALK			54.0N	48.0N	44.0N
SKIP			50.0N	46.0N	42.0N
CHECK1			48.UN	46.0N	40.0N
SCAN			48.0N	46.UN	40.0N
DIAG1			52.0N	46.0N	42.0N
DIAG2			52.0N	46.0N	42.0N
TEMP=	-55				
	VCC	=	4.5V	5.0V	5.57
GALPAT			42.0N	38.0N	36.0N
WALK			42.0N	38.0N	36.0N
SKIP			44.0N	38.0W	36.0N
CHECK1			46.UN	38.0N	34.0N
SCAN			40.0N	36.0N	32.0N
DIAG1			46.UN	38.0N	38.0N
DIAG2			46.0N	38.0N	38.0N
DIAG3			20.UN	20.0N	20.0N
TEMP=	125				
•	VCC	=	4.5V	5.0V	5.5V
GALPAT			68.UN	62.0N	56.0N
WALK			68.0N	62.0N	56.UN
SKIP			70.0N	62.0N	56.0N
CHECKI			64.0N	60.0N	54.UN
SCAN			66.0N	62.0N	56.0N
DIAG1			68.0N	62.0N	56.0N
DIAG2			68.0N	62.UN	56.0N
DIAG3			20.0N	20.0N	20.0N

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ADDRESS	SETUP	rime	RCA MWS5001D	12 SEP 77 SN:	4
TEMP=	25				
	VCC	=	4.5∀	5.0V	5.57
GALPAT			10.0N	10.0N	10.0N
WALK			10.0N	10.0N	10.0N
2×15			10.0N	10.0N	10.0N
CHECK1			18.0N	16.0N	16.0N
SCAN			10.0N	10.0N	10.0N
DIAGI			16.0N	16.0N	16.0N
DIAG2			16.0N	16.0N	16.0N
TEMP=	÷ 55				
	VCC	=	4.5 V	5.0V	5.5v
GALPAT			12.0N	10.0N	10.0N
WALK			12.0N	10.0N	10.0N
SKIP			10.0N	10.0N	10.UN
CHECK1			20.0N	16.0N	14.0N
SCAN			10.0N	10.0N	10.0N
DIAGI			18.0N	10.UN	10.UN
D1AG2			18.0N	16.CN	16.0N
DIAG3			10.0N	10.0.V	10.UN
TEMP=	125				
	VCC	=	4.5v	5.0 V	5.5V
GALPAT			10.0N	10.0N	10.UN
WALK			10.0N	10.0N	10.0N
SKIP			10.0N	10.0N	10.0N
CHECK1			26.0N	24.0N	24.0N
SCAN			10.0N	10.0N	10.0N
D1AG1			40.0N	34.0N	32.0N
DIAG2			40.0N	34.0N	32.UN
DIAG3			10.0N	10.0N	10.0N

	ADURESS	ного	TIME	RCA	MWS5001D 12 SEP	77	SN: 4	
	TEMP=	25						
		VCC	=	4.5V	5.0v	,	5.5V	
	GALPAT			-8.00N	-6.00N		-4.00N	l
	WALK			-R.00W	-6.00N		-4.00N	j
	SKIP			-8.00w	-6.00N		-4.00N	ŀ
	CHECK1			-10.0N	-6.00N		-4.00N	ŀ
	SCAN			-18.0N	-20.0N		-20.0N	j
	D1AG1			-10.0N	-6.00N		-4.00N	j
	D1AG2			-10.0N	-6.00N		-4.00N	l
	TEMP=	- 55						
		VCC	=	4.5V	5.0V		5,50	
	GALPAT			-6.00N	-4.00N		-2.00A	
	WALK			-6.00N	-4.00N		-2.00N	
	SKIP			-8.00N	-4.00N		-2.001	
	CHECK1			-8.00%	-4.00N		-2.00N	į
:	SCAN			-18.UN	-20.0N		-20.08	
ļ.	DIAG1			-8.00N	-4.00N		-2.00N	
	DIAG2			-8.00N	-4.00N		-2.00N	
	DIAG3			-20.0N	-20.0N		-20.0N	1
;								
	TEMP=	125						
-		VCC	=	4.5V	5.0V		5.50	
	GALPAT			-14.0N	-10.0N		-6.UON	
	WALK			-14.0N	-10.0N		-6.008	
	SKIP			-14.0N	-10.0N		-6.001	
	CHECK1			-14.0N	-10.UN		-8.004	
	SCAN			-18.0N	-18.0N		-18.04	
-	DIAG1			-14.0N	-10.0N		-8.00%	
	DIAG2			-14.UN	-10.0N		-6.00h	
-	DIAG3			-20.0N	-20.0N		-20.04	i

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CE TO WR	ITE TIME	RCA MWS5001D	12 SEP 77 SN:	4
TEMP=	25			
	vCC =	4.5V	5.0V	5.54
GALPAT		48.0N	44.UN	40.0 iv
WALK		46.0N	44.0N	40.0N
SKIP		48.0N	44.0N	40.0N
CHECKI		40.0N	42.0N	38.ON
SCAN		46.0N	42.0N	36.UN
DIAG1		48.0N	42.0N	38.0N
DIAG2		48.0N	42.0N	38.0N
TEMP=	~ 55			
	vCC =	4.5∀	5.0V	5.5V
GALPAT		40.0N	36.0N	32.0N
WALK		40.0N	36.0N	32.0N
SKIP		40.0N	36.0N	32.UN
CHECKI		42.0N	34.0N	30.00
SCAN		40.8E	34.0N	30.0N
DIAG1		44.0N	34.0N	34.0N
D1AG2		44.0N	38.0N	34.0N
DIAGE		0.00	0.00	0.00
TEMP=	125	•		
	VCC =	4.5 V	5.0 V	5.50
GALPAT		64.0N	58.0N	52.0N
WAGK		64.0N	58.0N	52.0N
SKIP		66.UN	60.0N	54.0N
CHECK1		62.0N	56.0N	50.0N
SCAN		64.UN	58.0N	52.0N
DIAG1		64.UN	58.0N	52.0N
DIAG2		64.0N	58.0N	52.0N
DIAG3		0.00	0.00	0.00

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ADDRESS	ACCES	5 TIME	RCA	MWS5001D	12 SEP	77	SN:	5
TEMP=	25							
	VCC	= 4	.5V		5.0V			5.5V
GALPAT		1	85.N		180.N			185.N
WALK		1	70.N		170.N			175.N
SKIP			75.N		170.N			175.N
CHECK 1			05.N		90.0N			80.00
SCAN			0.0N		50.0N			50.0N
DIAG1			70.N		165.N			175.N
DIAG2		1	75.N		170.N			175.N
TEMP=	-55							
	vcc	= 4	.5 v		5.0V			5.5V
GALPAT		2	05.N		150.N			150.N
WALK		1	45.N		140.N			145.N
SKIP		2	00.N		145.N		•	150.N
CHECK1			20.N		90.UN			75.0N
SCAN		5	0.0N		50.0N			50.0N
DIAGI			45.N		140.N			145.N
DIAG2			80.N		145.N			150.N
DIAG3		5	0.0N		50.0N	•		50.0N
TEMP=	125							
	VCC	= 4	.5 V		5.0V			5.5V
GALPAT			75.N		145.N			130.N
WALK			M.00		175.N			160.N
SKIP			80.N		150.N			130.N
CHECK1			50.N		130.N			120.N
SCAN			0.0N		50.0N			50.0N
DIAG1			05.N		180.N			160.N
D1AG2			05.N		180.N			165.N
DIAG3		5	0.0N		50.UN			50.0N

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DATA SET	UP TI	ME	RCA MWS5001D	12 SEP 77 SN:	5
TEMP=	25				
	VCC	=	4.5V	5.0V	5.5V
GALPAT			14.0N	12.0N	10.0N
WALK			14.0N	12.0N	10.0N
SKIP			14.0N	12.0N	12.0N
CHECKI			22.0N	18.0N	14.0N
SCAN			22.UN	18.0N	14.0N
DIAGI			14.0N	12.0N	10.0N
DIAG2			14.0N	12.0N	10.0%
TEMP=	-55				
	vCC	=	4.5V	5.0V	5.5V
GALPAT			14.0N	12.0N	10.0N
WALK			16.UN	12.0N	10.0N
SKIP			16.0N	14.0N	12.0N
CHECK1			20.0N	16.0N	14.UN
SCAN			20.UN	16.0N	12.0N
DIAGI			12.0N	10.0N	8.00N
DIAG2			12.0N	10.0N	8.00N
D1AG3			0.00	0.00	0.00
TEMP=	125				
	VCC	=	4.5V	5.0V	5.5V
GALPAT			16.0N	14.0N	14.0N
WALK			16.0N	14.0N	14.0N
SKIP			18.0N	10.0N	14.UN
CHECK1			22.0N	18.0N	18.0N
SCAN			20.0N	18.0N	18.0N
DIAG1	_		16.UN	14.0N	14.0N
DIAG2			16.0N	14.0N	14.0N
DIAG3			0.00	0.00	0.00

DATA HO	LD TIME	RCA	MWS5001D 12 SEP 77	SN: 5
TEMP=	25			
	VCC	= 4.5V	5.0V	5.5V
GALPAT		14.0N	16.UN	18.QN
WALK		14.0N	16.0N	18.0N
SKIP		14.0n	10.0N	18.0N
CHECK1		10.0N	12.0N	14.0N
SCAN		8.00%	12.0N	12.0N
DIAG1		14.UN	14.0N	18.0N
DIAG2		14.0N	14.0N	16.0N
TEMP=	→ 55			
	VCC	= 4.5V	5.0V	5.5V
GALPAT		14.0N	14.0N	18.0N
WALK		14.0N	16.0N	18.0N
SKIP		12.0N	14.0N	16.0N
CHECKI		10.0N	12.0N	14.00
SCAN		8.00N	12.0N	12.0N
bIAG1		12.0N	14.0N	16.0N
DIAG2		12.0N	14.0N	16.0N
D1AG3		0.00	0.00	0.00
TEMP=	125			
	vCC :	= 4.5V	5.0V	5.57
GALPAT		16.0N	18.UN	20,0N
WALK .		14.0N	18.0N	20.01
Sk IP		14.0N	18.0N	20.0N
CHECK 1		12.0N	14.0N	16.0N
SCAN		10.0N	12.0N	14.0N
DIAG1		14.0N	16.0N	20.0N
DIAG2		14.UN	16.0N	20.0N
D1AG3		0.00	0.00	0.00

WRITE	PULSE !	HTGIW	HCA MWS5001D	12 SEP 77	SN: 5
TEMP=	25				
	VCC	3	4.5 V	5.0 V	5.5V
GALPAI			54.0N	48.UN	46.0N
WALK			56.0N	52.0N	48.0N
SKIP			54.0N	48.0N	46.0N
CHECKI		4	54.0N	48.0N	44.0N
SCAN			54.0N	48.0N	44.0N
DIAGI			54.0N	48.0N	46.UN
D1AG2			54.0N	48.0N	44.UN
TEMP=	- 55				
	VCC	=	4.5V	5.0V	5.5V
GALPAT			46.0N	42.0N	38.0N
WALK			46.0N	44.0N	38.0N
SKIP			48.0N	44.0N	38.0N
CHECK1			52.0N	46.ÜN	38.UN
SCAN			46.0N	40.0N	38.0N
DIAGI			56.0N	48.ON	38.0W
D1AG2			56.0N	48.0N	38.0N
DIAG3			20.0N	20.UN	20.0N
TEMP=	125				
	VCC	=	4.5V	5.0V	5.5V
GALPAT			72.0N	64.0N	60.0N
WALK			72.0N	64.0N	60.0N
SKIP			72.0N	66.0N	62.0N
CHECK1			70.0N	62.0N	50.0N
SCAN			70.0N	62.0N	56.0N
D1AG1			70.0N	62.0N	56.0N
DIAG2			70.0N	62.UN	56.UN
D1AG3			20.0N	20.0N	20.0N

ADDRESS	SETUP	TIME	RCA MWS5001D	12 SEP 77	SN: 5
TEMP=	25				
	VCC	=	4.5V	5.0V	5.57
GALPAT			74.0N	86.0N	104.N
WALK			72.0N	86.UN	102.N
SKIP			68.0N	82.0N	100.N
CHECK1			24.0N	26.0N	36.0N
SCAN			14.0N	24.0N	34.0N
DIAGI			76.0N	86.00	98.UN
DIAG2			76.0N	86.UN	96.0N
TEMP=	-55				
	VCC	=	4.5V	5.0V	5.5V
GALPAT			62.0N	74.UN	86.0N
WALK			62.0N	72.0N	84.UN
SKIP			60.0N	70.0N	82.0N
CHECK1			32.0N	22.0M	18.0N
SCAN			10.0N	10.0N	18.0N
DIAG1			68.0N	76.QN	84.0N
D1AG2			70.0N	76.UN	84.0N
DIAG3			10.0N	10.0N	10.0N
TEMP=	125				
	VCC	=	4.5v	5.0V	5.50
GALPAT			10.0N	10.0N	10.0N
WALK			10.0N	10.0N	10.0N
SKIP			10.0N	10.UN	10.0N
CHECK1			34.0N	30.0N	30.0N
SCAN			10.0N	10.0N	10.UN
DIAGI			40.0N	36.UN	32.0N
DIAG2			40.0N	36.014	34.UN
DIAG3			10.0N	10.0N	10.6N

ADDRESS	ного	TIME	RCA	MWS5001D 12 SEP 7	77 SN: 5
TEMP=	25				
	VCC	3	4.5V	5.0V	5.5V
GALPAT			-10.0N	-6.00N	-4.00N
WALK			-10.0N	-6.00N	-4.00N
SKIP			-10.0N	-6.00N	-4.00N
CHECK1			-15.0N	-8.00m	-4.00N
SCAN			-18.0N	-18.0N	-20.0N
DIAG1			-12.0N ·	-8.00N	-4.00N
DIAG2			-12.0N	-8.00N	-4.00N
TEMP=	- 55				
	VCC	=	4.5V	5.0V	5.50
GALPAT			-8.00N	-4.00N	-2.00N
WALK			-10.0N	-6.00N	-2.00N
SKIP			-10.0N	-6.00N	-4.00N
CHECK1			-10.UN	-6.00N	-4.00N
SÇAN			-18.UN	-18.UN	-20.GN
DIAG1			-10.0N	-6.00N	-4.00N
DIAG2			-10.0N	-6.00N	-4.00N
D1AG3			-20.0N	-20.0N	-20.0N
TEMPS	125				
	VCC	=	4.5∀	5.0V	. 5.5∀
GALPAT			-14.0N	-10.0N	-6.00N
WALK			-14.0N	-10.0N	-6.00N
SKIP			-14.0N	-10.0N	-6.00N
CHECK1			-14.0N	-10.0N	-6.00N
SCAN			-18.0N	-18.0N	-18.0N
D1AG1			-14.0N	-10.0N	-6.00N
DIAG2			-14.0N	-10.0N	-6.00N
DIAG3			-20.0N	-20.0N	-20.0N

CE TO WE	CITE TIME	RCA MWS5001D	12 SEP 77	SN: 5
TEMP=	25			
	vCC =	4.5V	5.00	5.5V
GALPAT		52.0N	46.0N	42.0N
WALK		52.0N	46.0N	42.0N
91x2		52.0N	46.0N	42.0N
CHECK1		52.0N	46.UN	40.0N
SCAN		52.0N	46.0N	40.0N
DIAGI		56.0N	46.0N	42.0N
DIAG2		56.0N	48.0N	42.0N
TEMP=	-55			
	VCC =	4.5V	5.0V	5.5V
GALPAT		46.0N	40.0N	36.0N
WALK		46.0N	40.0N	36.UN
SKIP		46.0N	40.0N	36.0N
CHECK1		48.0N	42.0N	34.0N
SCAN		44.0N	38.0N	34.0N
DIAG1		56.0N	48.0N	40.0N
DIAG2		56.0N	44.0N	40.0N
DIAG3		0.00	0.00	0.00
TEMP=	125			
	VCC =	4.5 V	5.0V	5.50
GALPAT		70.0N	62.0N	56.0N
MALK		70.0N	62.0N	56.UN
SKIP		72.0N	64.UN	58.0N
CHECK1		66.0N	60.UN	54.0N
SCAN		66.0N	60.0N	54.GN
DIAG1		66.0N	60.0N	54.0N
D1AG2		66.0N	60.0N	54.0N
D1AG3		0.00	0.00	0.00

FUNCTIONAL TESTS AND AC AND DC PARAMETRIC TESTS

PROCESSION PROCESSION BUT FILMED

HCA MWS5001 1K CMUS STATIC RAP 08 UCT 77 TEMP: 25 C SN: 1

PAGE 1 OF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VCC	= 4.5V	5.0V	5.57	LIMIT
ADDRESS ACCESS TIME	(TAA)	160.N	125.N	110.N	250.NS
DATA SETUP TIME	(TDS)	16.0N	14.0N	12.0N	50.0NS
DATA HULD TIME	(TDH)	16.0N	18.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	46.0N	40.0N	38.ON	90.0NS
ADDRESS SETUP TIME	(TAS)	26.0N	20.0N	22.UN	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00N	-2.00N	4.00N	60.0NS
CE TO WRITE TIME	(Tws)	48.0N	38.0N	32.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	155.N	130.N	115.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME *	(TEN)	30.0N	26.0N	22.0N	60.0NS

DC PARAMETRIC MÉASUREMENTS :

:	(DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 1	145.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH)	1.38 V	3.60 V
OUTPUT LEAKAGE CURRENT	(10L) 4	120.NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -5	77.PA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 6	54.PA	500.NA
SUPPLY CURRENT	(TCC1BO)	143.NA	1.00MA
SUPPLY CURRENT	(ICC181) 1	6.3UA	1.00MA
SUPPLY CURRENT	(1CC2B0) 5	513.NA	1.00MA
SUPPLY CURRENT	(ICC281) 1	7.2UA	1.00MA

DEVICE PASSED ALL TESTS

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: -20 C SN: 1
PAGE 2 OF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	CC = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	170.N	130.N	110.N	250.NS
DATA SÉTUP TIME	(TDS)	14.0N	12.0N	10.0N	50.0NS
DATA HULD TIME	(TDH)	18.0N	18.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	48.0N	38.0N	38.ON	90.0NS
ADDRESS SETUP TIME	(TAS)	30.0N	22.0N	20.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-4.00N	0.00	4.00N	60.0NS
CE TO WRITE TIME	(TWS)	46.0N	40.0N	34.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	145.N	115.N	105.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	28.0N	24.0N	20.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

		DATA	LIMIT
BUTPUT VOLTAGE GOW	(VOL)	125.MV	400.MV
OUTPUT VOLTAGE HIGH	(AOH)	4.40 V	3.60 V
UUTPUT LEAKAGE CURRENT	(10L)	54.0NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL)	-423.PA	500.NA
AVERAGE INPUT CURRENT HIGH	(HII)	8.54E+18 A	500.NA
SUPPLY CURRENT	(100180)	24.0NA	1.00MA
SUPPLY CURRENT	(ICC181)	16.1UA	1.00MA
SUPPLY CURRENT	(ICC2B0)	29.5NA	1.00MA
SUPPLY CURRENT	(ICC281)	17.00A	1.00MA

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: -55 C SN: 1

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	180.N	130.N	105.N	250.NS
DATA SETUP TIME	(TUS)	14.0N	12.0N	10.0N	50.0NS
DATA HOLD TIME	(PGT)	16.0N	18.0N	20.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	46.0N	40.0N	32.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	40.0N	26.0N	22.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00%	0.00	4.00N	60.0NS
CE TO WRITE TIME	(TWS)	44.0N	38.0N	32.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	155.N	115.%	105.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0Ñ	220.NS
OUTPUT ENABLE TIME	(TEN)	26.0N	22.0N	20.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

		DATA	LIMIT
OUTPUT VOLTAGE LOW	(AOP)	120.MV	400.MV
OUTPUT VOLTAGE HIGH	(HOV)	4.41 V	3.60 V
OUTPUT LEAKAGE CURRENT	(10L)	17.5NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL)	-154.PA	500.NA
AVERAGE INPUT CURRENT HIGH	(118)	1.92NA	500.NA
SUPPLY CURRENT	(ICC180)	5.00NA	1.00MA
SUPPLY CURRENT	(ICC181)	16.1UA	1.00MA
SUPPLY CURRENT	(ICC2B0)	5.00NA	1.00MA
SUPPLY CURRENT	(1CC2B1)	16.9UA	1.00MA

RCA MWS5001 1K CMUS STATIC RAM 08 OCT 77 TEMP: 85 C SN: 1

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PASSED GALPAT (wide Limits)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	160.N	135.N	120.N	250.NS
DATA SETUP TIME	(TDS)	18.0N	14.0N	14.0N	50.0NS
DATA HOLD TIME	(HOH)	16.0N	20.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	54.GN	46.0N	42.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	22.0N	22.0N	24.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00N	-2.00N	4.00N	60.0NS
CE TO WRITE TIME	(TWS)	50.0N	42.0N	36.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	165.N	145.N	130.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0h	220.NS
OUTPOT ENABLE TIME	(TEN)	32.0N	28.0N	24.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 170.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) 4.35 V	3.60 V
OUTPUT LEAKAGE CURRENT	(10L) 3.21UA <*	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -8.58NA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 25.5NA	500.NA
SUPPLY CURRENT	(ICC180) 13.8UA	1.00MA
SUPPLY CURRENT	(ICC181) 31.0UA	1.00MA
SUPPLY CURRENT	(ICC280) 15.3UA	1.00MA
SUPPLY CURRENT	(ICC281) 28.2UA	1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMUS STATIC RAM OR OCT 77 TEMP: 125 C SN: 1

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	170.N	145.N	130.N	250.NS
DATA SETUP FIME	(TUS)	16.0N	14.0N	16.0N	50.0NS
DATA HOLD TIME	(TDH)	18.0N	20.0N	24.0N	50.0NS
WRITE PULSE WIDTH	(TwP)	60.0N	54.0N	48.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	26.0N	26.0N	26.0N	70.0NS
ACDRESS HOLD TIME	(TAH)	-6.00N	-2.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	58.0N	50.0N	44.0N	70.0NS
MIN READ CYCLE FIME	(TRC)	175.N	155.N	145.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 84.0N	< 84.0N	< 84.0N	220.NS
OUTPUT ENABLE FIME	(TEN)	34.0N	30.0N	28.0N	00.0NS

DC PARAMETRIC MEASUREMENTS :

			DATA	TIMIL
OUTPUT VOL	TAGE LOW	(AOT)	190.MV	400.HV
OUTPUT VOL	TAGE HIGH	(MOH)	4.32 V	3.60 V
OUTPUT LEA	KAGE CURRENT	(10L)	10.7UA <*	1.00UA
AVERAGE IN	PUT CURRENT LOW	(IIL)	-100.NA	500.NA
AVERAGE IN	PUT CURRENT HIGH	(HII)	105.NA	500.NA
SUPPLY CUR	RENT	(ICC180)	96.4UA	1.00MA
SUPPLY CUR	RENT	(ICC181)	113.UA	1.00MA
SUPPLY CUR	RENT	(ICC2B0)	105.UA	1.00MA
SUPPLY CUR	RENT	(ICC281)	90.9UA	1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMUS STATIC RAM 08 OCT 77 TEMP: 25 C SN: 2

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT ;
ADDRESS ACCESS TIME	(TAA)	140.N	115.N	105.N	250.NS
DATA SETUP TIME	(TUS)	12.0N	12.0N	14.0N	50.0NS
DATA HOLD TIME	(TDH)	18.0N	20.0N	22.0N	50.0NS
WRITE PULSE WIOTH	(TWP)	46.0N	44.0N	40.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	22.0N	18.0N	20.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-4.00N	0.00	2.00N	60.0NS
CE TO WHITE TIME	(TWS)	48.0N	40.0N	36.QN	70.0NS
MIN READ CYCLE SIME	(TRC)	130.N	110.N	100.N	250.NS
MIN ARITE CYCLE TIME	(TWĈ)	< 80.UN	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	26.0N	22.0N	20.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

	Į.	ATA	LIMIT
OUTPUT VULTAGE LOW	(VOL)	130.MV	400.MV
OUTPUT VOLIAGE HIGH	(VOH) 4	4.38 V	3.60 V
OUTPUT LEAKAGE SURRENT	(104)	40.0NA	1.00UA
AVERAGE INPUT CURRENT LOW		1.38NA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH)	1.23NA	500.NA
SUPPLY CURRENT	(ICC1B0)	76.UUA	1.00MA
SUPPLY CURRENT	(ICC181) 2	AU.005	1.00MA
SUPPLY CURRENT	(ICC280) (69.1UA	1.00MA
SUPPLY CURRENT	(ICC281)	215.UA	1.00MA

RCA MWS5001 1K CMOS STATIC RAM 08 UCT 77 TEMP: -20 C SN: 2

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VÇC	= 4.5V	5.0V	5.5v	LIMIT
ADDRESS ACCESS TIME	(FAA)	140.N	115.N	100.N	250.NS
DATA SETUP TIME	(TDS)	12.UN	10.0N	12.0N	50.0NS
DATA HOLD TIME	(TDA)	18.0N	22.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	48.0N	44.0N	38.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	22.0N	20.0N	18.0N	70.0NS
AUDRESS HOLD TIME	(HAT)	-4.00N	0.00	4.00N	60.0NS
CE TO WRITE TIME	(TWS)	44.0N	40.GN	36.0N	70.0NS
MIN READ CYCLE PIME	(TRC)	115.N	100.N	100.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	24.UN	20.0N	18.0N	60.0NS

DC PAPAMETRIC MEASUREMENTS :

		DATA	LIMIT
COTPUT VOLTAGE LOW	(VOL)	110.MV	400.MV
OUTPUT VOLTAGE HIGH	(HOV)	4.40 V	3.60 V
DUTPUT LEAKAGE CURRENT	(10L)	2.00NA	1.000A
AVERAGE INPUT CURRENT LOW	(IIL)	-346.PA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH)	154.PA	500.NA
SUPPLY CURRENT	(ICC180)	64.0UA	1.00MA
SUPPLY CURRENT	(ICC181)	198.UA	1.00MA
SUPPLY CURRENT	(ICC280)	59.8UA	1.00MA
SUPPLY CURRENT	(ICC2B1)	219.UA	1.00MA

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: -55 C SN: 2

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	145.N	105.N	95.0N	250.NS
DATA SETUP FIME	(TDS)	12.0N	10.0N	10.0N	50.0NS
DATA HOLD TIME	(TDA)	18.QN	20.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	46.0N	38.0N	38.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	26.0N	20.0N	20.0N	70.0NS
ADDRESS HOLD TIME	(HAH)	-4.00N	0.00	4.00N	60.0NS
CE TO WRITE TIME	(TWS)	44.0N	40.0N	36.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	115.N	100.N	100.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
UUTPUT ENABLE TIME	(TEN)	22.0N	18.0N	16.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

DATA	LIMIT
(VOL) 100.MV	400.MV
(VOH) 4.42 V	3.60 V
(10L) 16.5NA	1.00UA
(11L) -231.PA	500.NA
(IIH) 962.PA	500.NA
(ICC1B0) 61.0UA	1.00MA
(ICC181) 205.UA	1.00MA
(ICC280) 56.6UA	1.00MA
(ICC281) 226.UA	1.00MA
	(VOL) 100.MV (VOH) 4.42 V (IOL) 16.5NA (IIL) -231.PA (IIH) 962.PA (ICC1BO) 61.0UA (ICC1B1) 205.UA (ICC2BO) 56.6UA

RCA MWS5001 1K CMOS STATIC RAM U8 UCT 77 TEMP: 85 C SN: 2
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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (FIGHT LIMIT)

	VCC	: = 4.5V	5.0V	5.5V	GIMIT
ADDRESS ACCESS TIME	(TAA)	145.N	125.N	115.N	250.NS
DATA SETUP TIME	(TDS)	16.0N	14.0N	16.0N	50.0NS
DATA HOLD TIME	(TDH)	18.0N	22.ON	26.0N	50.0NS
WRITE PULSE WIDTH	(TwP)	54.0N	48.0N	46.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	22.0N	22.0N	22.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-4.00N	0.00	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	50.00	48.UN	40.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	145.N	125.N	115.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	28.0N	24.0N	22.0N	60.0NS

DC PARAMETRIC MEASUREMENTS:

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 155.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) 4.36 V	3.60 V
OUTPUT LEAKAGE CURRENT	(10L) 670.NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) +26.3NA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 31.6NA	500.NA
SUPPLY CURRENT	(ICC180) 124.UA	1.00MA
SUPPLY CURRENT	(ICC181) 261.UA	1.00MA
SUPPLY CURRENT	(ICC280) 119.UA	1.00MA
SUPPLY CURRENT	(ICC281) 248.UA	AMOO. t

DEVICE PASSED ALL TESTS

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: 125 C SN: 2

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	V	CC = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(PAA)	160.N	140.N	130.N	250 .NS.
DATA SETUP TIME	(TDS)	16.0N	16.0N	18.0N	50.0NS
DATA HOLD TIME	(TDH)	20.0N	22.0N	26.0N	50.0NS
WRITE PULSE WIOTH	(TWP)	62.0N	56.0N	54.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	24.0N	24.0N	24.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00N	0.00	2.00N	00.0NS
CE TO WRITE TIME	(TWS)	60.0N	54.0N	50.0N	70.0NS
MIN READ CYCLE FIME	(TRC)	155.N	145.N	130.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 88.0N	< 88.0N	< 88.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	32.0N	28.UN	24.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

			DATA	LIMIT
OUTPUT VOLTAGE	LOW	(VOL)	175.MV	400.MV
OUTPUT VOLTAGE		(VOH)	4.34 V	3.60 V
CUTPUT LEAKAGE	CURRENT	(10L)	3.51UA <	* 1.00UA
AVERAGE INPUT C	URRENT LOW	(IIL)	-165.NA	500.NA
AVERAGE INPUT C	URRENT HIGH	(HII)	145.NA	500.NA
SUPPLY CURRENT		(ICC1B0)	311.UA	1.UOMA
SUPPLY CURRENT		(161331)	493.UA	1.00MA
SUPPLY CURRENT		(ICC280)	312.UA	1.00MA
SUPPLY CURRENT		(ICC281)	408.UA	1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: 25 C SN: 3

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VCC	= 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	300.N <*	215.N	175.N	250.NS
DATA SETUP TIME	(TDS)	24.0N	20.0N	20.UN	50.0NS
DATA HOLD TIME	(TDH)	14-0N	18.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	54.0N	48.0N	44.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	32.0N	26.0N	26.0N	10.0NS
ADDRESS HOLD TIME	(TAH)	-8.00N	-4.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	54.0N	50.0N	40.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	190.N	155.N	140.N	250.NS
MIN WRITE CYCLE TIME	(TWC) <	80.0N	< 80.0N	< 80.0M	220.NS
OUTPUT ENABLE TIME	(TEN)	36.0N	30.0N	28.0N	60.0NS

DC PARAMETRIC MEASUREMENTS:

	D	ATA	LIMIT
OUTPUT VOLFAGE LOW	(VOL) 1	75.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) 4	.36 V	3.60 V
OUTPUT LEAKAGE CURRENT	(IOL) 3	.50NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -4:	23.PA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 6	54.PA	500.NA
SUPPLY CURRENT	(ICC180) 1	5.3UA	1.00MA
SUPPLY CURRENT	(ICC161) 8	7.7UA	1.00MA
SUPPLY CURRENT	(ICC280) 5	.75UA	1.00MA
SUPPLY CURRENT	(ICC281) 7	5.7UA	1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMUS STATIC RAM 08 OCT 77 TEMP: -20 C SN: 3

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VCC	: = 4.5V	5.0V	5.57	LIMIT
ADDRESS ACCESS TIME	(TAA)	1.00K <*	235.N	180.N	250.NS
DATA SETUP TIME	(TDS)	20.0N	18.0N	16.0N	50.0NS
DATA HOLD TIME	(TDH)	14.0N	18.0N	20.0N	50.0NS
WRITE POLSE WIDTH	(TWP)	58.ON	50.0N	44.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	48.ON	26.0N	24.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-8.00N	-4.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	54.0N	46.0N	40.0N	70.0NS
MIN READ CYCLE FIME	(TRC)	185.N	140.N	125.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	32.0N	28.0N	24.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 155.MV	400_MV
OUTPUT VOLTAGE HIGH	(VOH) 4.38 V	3.60 V
CUTPUT LEAKAGE CURRENT	(IOL) 0.00 A	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -38.5PA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 308.PA	500.NA
SUPPLY CURRENT	(ICC180) 11.0UA	1.00MA
SUPPLY CURRENT	(ICC181) 90.1UA	1.00MA
SUPPLY CURRENT	(ICC280) 2.81UA	1.00MA
SUPPLY CURRENT	(ICC281) 80.7UA	1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: -55 C SN: 3

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VCC =	4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	1.00K <*	270.N <*	190.N	250.NS
DATA SETUP TIME	(TDS)	22.0N	16.0N	16.0N .	50.0NS
DATA HOLD TIME	(TDH)	14-0N	16.0N	20.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	56.0N	48.0N	38.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	48.0N	32.0N	24.0N	70.0NS
ADDRESS HOLD TIME	(HAT)	1.00K <*	-4.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	56.0N	48.0N	34.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	190.N	140.N	115.N	250.NS
MIN WRITE CYCLE TIME	(TWC) <	90.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	168.N <*	26.0N	24.UN	60.0NS

DC PARAMETRIC MEASUREMENTS:

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 140.M	_
OUTPUT VOLTAGE HIGH	(VOH) 4.39	V 3.60 V
OUTPUT LEAKAGE CURRENT	(IOL) 4.00N	A 1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -269.P	A 500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 538.P	A 500.NA
SUPPLY CURRENT	(ICC180) 8.71U	A 1.00MA
SUPPLY CURRENT	(ICC1B1) 95.0U	A 1.00MA
SUPPLY CURRENT	(ICC2B0) 1.64U	A 1.00MA
SUPPLY CURRENT	(ICC2B1) 87.7U	A 1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMUS STATIC RAM OB UCT 77 TEMP: 85 C SN: 3
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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VCC	= 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	270.N <*	210.N	180.N	250.NS
DATA SETUP TIME	(TDS)	28.ON	24.0N	24.0N	50.0NS
DATA HOLD TIME	(IDH)	16.0N	20.0N	22.ON	50.0NS
WRITE PULSE WIDTH	(TWP)	62.0N	54.0N	52.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	30.0N	28.0N	30.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-10.0N	-4.00N	2.00N	60.0NS
CE TO WRITE TIME	(Tws)	64.0N	52.0N	48.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	210.N	175.N	160.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 92.0N	< 92.0N	< 92.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	40.0N	34.0N	30.0N	00.0NS

DC PARAMETRIC MEASUREMENTS :

DATA	LIMIT
(VOL) 210.MV	400.MV
(VOH) 4.32 V	3.60 V
(IOL) 255.NA	1.00UA
(IIL) -18.6NA	500.NA
H (IIH) 45.1NA	500.NA
(ICC180) 33.8UA	1.00MA
(ICC181) 108.UA	1.00MA
(ICC280) 25.5UA	1.00MA
(ICC281) 90.0UA	1.00MA
	(VOL) 210.MV (VOH) 4.32 V (IOL) 255.NA (IIL) -18.6NA (IIH) 45.1NA (ICC1BO) 33.8UA (ICC1B1) 108.UA (ICC2BO) 25.5UA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMUS STATIC RAM 08 UCT 77 TEMP: 125 C SN: 3

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PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VCC =	4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	280.N <*	225.N	195.N	250.NS
DATA SETUP TIME	(TDS)	26.0N	24.0N	22.0N .	50.0NS
DATA HOLD TIME	(TDH)	18.0N	20.0N	26.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	72.0N	64.0N	50.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	34.0N	32.0N	34.ON	70.0NS
ADDRESS HOLD TIME	(HAT)	-10.0N	-4.00N	2.00N	60.0NS
CE TO WRITE TIME	(TwS)	72.0N <*	62.0N	54.ON	70.0NS
MIN READ CYCLE TIME	(TRC)	230.N	195.N	180.N	250.NS
MIN WRITE CYCLE TIME	(TWC) <	104.N	< 104.N	< 104.N	220.NS
OUTPUT ENABLE TIME	(TEN)	42.0N	38.0%	34.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

	DATA	LIMIT
OUTPUT VOLTAGE LUW	(VOL) 240.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) 4.30 V	3.60 V
OUTPUT LEAKAGE CURRENT	(IOL) 670.NA	1.00UA
AVERAGE INPUT CURRENT LUW	(IIL) -94.8NA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 107.NA	500.NA
SUPPLY CURRENT	(ICC180) 115.UA	1.00MA
SUPPLY CURRENT	(ICC181) 197.UA	1.00MA
SUPPLY CURRENT	(ICC280) 116.UA	1.00MA
SUPPLY CURRENT	(ICC281) 158.UA	1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: 25 C SN: 4

PAGE 1 OF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (FIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(ÄAT)	125.N	105.N	95.0N	250.NS
DATA SETUP TIME	(TDS)	16.0N	14.0N	14.0N .	50.0NS
DATA HOLD TIME	(TDH)	12.0N	14.UN	16.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	48.0N	44.0N	40.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	18.0N	16.GN	18.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00N	-4.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	46.0N	40.0N	36.UN	70.0NS
MIN READ CYCLE FIME	(TRC)	130.N	115.N	105.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	26.0N	22.0N	20.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 120.MV	400_MV
OUTPUT VOLTAGE HIGH	(VOH) 4.38 V	3.60 V
GUTPUT LEAKAGE CURRENT	(IOL) 770.NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -2.12NA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 2.58NA	500.NA
SUPPLY CURRENT	(ICC180) 25.9UA	1.00MA
SUPPLY CURRENT	(ICC1B1) 102.UA	1.00MA
SUPPLY CURRENT	(ICC280) 26.4UA	1.00MA
SUPPLY CURRENT	(ICC281) 100.UA	1.00MA

RCA MWS5001 1K CMOS STATIC RAM OB UCT 77 TEMP: -20 C SN: 4

PAGE 2 UF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	ACC	= 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS FIME	(TAA)	125.N	100.N	90.0N	250.NS
DATA SETUP TIME	(TDS)	18.0N	12.0N	12.0N .	50.0NS
DATA HOLD TIME	(TDH)	12.0N	14.0N	16.UN	50.0NS
WRITE PULSE WIDTH	(TWP)	46.0N	39.0N	38.ON	90.0NS
ADDRESS SETUP TIME	(TAS)	18.0N	16.0N	16.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00N	-2.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	44.0N	36.0N	32.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	120.N	100.N	100.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	24.0n	22.0N	18.0N	60.0NS

DC PARAMETRIC MEASUREMENTS:

		DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL)	100.MV	400.MV
OUTPUT VOLTAGE HIGH	(HOV)	4.40 V	3.60 V
OUTPUT LEAKAGE CURRENT	(IOL)	87.5NA	1.00UA
AVERAGE INPUT CURRENT LOW	(11L)	-385.PA	500.NA
AVERAGE INPUT CURRENT HIGH	(HII)	115.PA	500.NA
SUPPLY CURRENT	(ICC1B0)	3.26UA	1.00MA
SUPPLY CURRENT	(ICC1B1)	63.8UA	1.00MA
SUPPLY CURRENT	(ICC2B0)	3.32UA	1.00MA
SUPPLY CURRENT	(ICC2B1)	72.6UA	1.00MA

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: -55 C SN: 4

PAGE 3 UF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	125.N	95.0N	85.0N	250.NS
DATA SETUP TIME	(TOS)	14.0N	12.0N	12.0N	50.0NS
DATA HOLD TIME	(TOH)	12.0N	14.0N	16.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	44.0N	38.0N	32.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	18.0N	16.0N	16.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-4.00N	-2.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	42.0N	36.0N	28.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	115.N	100.N	100.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	22.0N	20.0N	18.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

		DATA	LIMIT
OUTPUT VOLTAGE LOW OUTPUT VOLTAGE HIGH	(AOH) (AOP)	95.0MV 4.42 V	400.MV 3.60 V
OUTPUT LEAKAGE CURRENT	(10L)	32.0NA	1.00UA
AVERAGE INPUT CURRENT LOW AVERAGE INPUT CURRENT HIGH	(IIL)	-38.5PA 1.58NA	500.NA 500.NA
SUPPLY CURRENT SUPPLY CURRENT SUPPLY CURRENT SUPPLY CURRENT	(ICC180) (ICC181) (ICC280) (ICC281)	491.NA 58.8UA 478.NA 68.3UA	1.00MA 1.00MA 1.00MA 1.00MA

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: 85 C SN: 4

PAGE 4 UF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	۷C	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	140.N	120.N	110.N	250.NS
DATA SETUP TIME	(TDS)	20.0N	16.0N	16.0N .	50.0NS
DATA HOLD TIME	(TDH)	12.0N	14.0N	18.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	60.UN	54.QN	48.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	18.0N	18.UN	18.0N	70.0NS
ADDRESS HOLD TIME	(HAT)	-6.00N	-4.00N	0.00	60.0NS
CE TO WRITE TIME	(TWS)	58.0N	50.0N	44.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	150.N	135.N	125.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	30.0N	26.0N	24.0N	60.0NS

DC PARAMETRIC MEASUREMENTS:

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VGL) 140.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) 4.36 V	3.60 V
DUTPUT LEAKAGE CURRENT	(IOL) 6.30UA <	* 1.00UA
AVERAGE INPUT CURRENT LOW	(11L) +38.9NA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 63.0NA	500.NA
SUPPLY CURRENT	(ICC180) 209.UA	1.00MA
SUPPLY CURRENT	(ICC181) 388.UA	1.00MA
SUPPLY CURRENT	(ICC280) 208.UA	1.00MA
SUPPLY CURRENT	(ICC281) 304.UA	1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

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RCA MWS5001 1K CMUS STATIC RAM 08 OCT 77 TEMP: 125 C SN: 4
PAGE 5 UF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	vec	: = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	170.N	145.N	130.N	250.NS
DATA SETUP TIME	(TDS)	20.0N	18.00	18.ON .	50.0NS
DATA HOLD TIME	(TDH)	14.0N	16.0N	20.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	66.0N	60.0N	54.0N	90.0NS
ADDRESS SETUP TIME .	(TAS)	20.0N	20.0N	22.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-8.00N	-4.00N	0.00	60.0NS
CE TO WRITE TIME	(TWS)	64.0N	58.0N	50.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	180.N	155.N	145.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 86.0N	< 86.0N	< 86.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	32.0N	28.0N	26.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

	DATA	LIMIT
OUTPUT VOLTAGE LOW OUTPUT VOLTAGE HIGH	(VOL) 160.MV (VOH) 4.33 V	400.MV 3.60 V
OUTPUT LEAKAGE CURRENT	(10L) 21.6UA <	* 1.00UA
AVERAGE INPUT CURRENT LOW AVERAGE INPUT CURRENT HIGH	(IIL) -240.NA (IIH) 263.NA	500.NA 500.NA
SUPPLY CURRENT SUPPLY CURRENT SUPPLY CURRENT SUPPLY CURRENT	(ICC180) 727.UA (ICC181) 1.13MA < (ICC280) 716.UA (ICC281) 838.UA	1.00MA * 1.00MA 1.00MA 1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

RCA MWS5001 1K CMOS STATIC RAM OB OCT 77 TEMP: 25 C SN: 5

PAGE 1 UF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	160.N	130.N	110.N	250.NS
DATA SETUP TIME	(TDS)	20.0N	16.0N	14.0N .	50.0NS
DATA HOLD TIME	(TDH)	14.0N	18.0N	20.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	54.0N	46.0N	40.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	24.0N	20.0N	22.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00N	-2.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	50.0N	46.0N	38.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	155.N	130.N	115.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	30.0N	26.0N	22.0N	00.0NS

DC PARAMETRIC MEASUREMENTS:

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 140.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) 4.37 V	3.60 V
OUTPUT LEAKAGE CURRENT	(IOL) 71.5NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -2.81NA	500.NA
AVERAGE INPUT CURRENT HIGH	ANBO.E (HII)	500.NA
SUPPLY CURRENT	(ICC180) 3.36UA	1.00MA
SUPPLY CURRENT	(ICC181) 4.37UA	1.00MA
SUPPLY CURRENT	(ICC280) 146.UA	1.00MA
SUPPLY CURRENT	(ICC281) 146.UA	1.00MA

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: -20 C SN: 5

PAGE 2 UF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0 ¥	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	170.N	130.N	110.N	250.NS
DATA SETUP TIME	(TOS)	20.0N	14.0N	12.0N .	50.0NS
DATA HOLD TIME	(TDH)	14.0N	18.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TwP)	46.0N	46.0N	38.UN	90.0NS
ADDRESS SETUP TIME	(TAS)	26.0N	20.0N	20.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00N	-2.00N	2.00N	60.0NS
CE TO WRITE TI'E	(TWS)	50.0N	44.0N	38.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	145.N	120.N	105.N	250.NS
MIN WRITE CYCLE TIME	(TwC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	28.0N	24.UN	20.0N	60.0NS

DC PARAMETRIC MEASUREMENTS:

	•	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL)	125.MV	400.MV
OUTPUT VOLTAGE HIGH	(NOH)	4.39 V	3.60 V
DUMBLE I CAVACC ADDRESSE	(101)	5.00NA	1.00UA
OUTPUT LEAKAGE CURRENT	(IOL)	3.UUNA	1.000A
AVERAGE INPUT CURRENT LOW	(IIL)	-192.PA	500.NA
AVEHAGE INPUT CURRENT HIGH	(H1I)	269.PA	500.NA
SUPPLY CURRENT	(ICC1B0)	551.NA	1 - 00MA
SUPPLY CURRENT	(ICC181)	638.NA	1.00MA
SUPPLY CURRENT	(ICC2B0)	132.UA	1.00MA
SUPPLY CURRENT	(ICC2B1)	132.UA	1.00MA

RCA MWS5001 1K CMOS STATIC RAM 08 OCT 77 TEMP: -55 C SN: 5

PAGE 3 UF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	180.N	130.N	110.N	250.NS
DATA SETUP TIME	(TDS)	16.0N	14.0N	12.0N .	50.0NS
DATA HOLD TIME	(TDH)	14.0N	18.0N	20.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	50.0N	42.0N	40.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	32.0N	22.0N	20.0N	70.0NS
ADDRESS HOLD TIME	(HAT)	-6.00N	0.00	4.00N	60.0NS
CE TO WRITE TIME	(TWS)	52.0N	40.0N	36.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	150.N	115.N	100.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 80.0N	< 80.0N	< 80.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	26.0N	22.0N	20.0N	60.0NS

DC PARAMETRIC MEASUREMENTS:

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 115.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) 4.41 V	3.60 V
OUTPUT LEAKAGE CURRENT	(IOL) 13.5NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -692.PA	500.NA
AVERAGE INPUT CURRENT HIGH	(HII) 3.35NA	500.NA
SUPPLY CURRENT	(ICC180) 259.NA	1.00MA
SUPPLY CURRENT	(ICC181) 271.NA	1.00MA
SUPPLY CURRENT	(ICC2B0) 123.UA	1.00MA
SUPPLY CURRENT	(ICC281) 123.UA	1.00MA

DEVICE PASSED ALL TESTS

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RCA MWS5001 1K CMOS STATIC RAM 08 QCT 77 TEMP: 85 C SN: 5

PASSED GALPAT (WIDE LIMITS)
PASSED NOISE IMMUNITY FUNCTIONAL
PASSED GALPAT (TIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	155.N	135.N	120.N	250.NS
DATA SETUP TIME	(TDS)	20.0N	16.0N	16.0N .	50.0NS
DATA HOLD TIME	(TDH)	14.0N	18.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	62.0N	54.0N	48.ON	90.0NS
ADDRESS SETUP TIME	(TAS)	24.0N	22.0N	24.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-6.00N	-2.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	60.0N	52.0N	46.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	160.N	140.N	125.N	250.NS
MIN WRITE CYCLE TIME	(TWC)	< 82.0N	< 82.0N	< 82.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	32.0N	28.0N	24.0N	60.0NS

DC PARAMETRIC MEASUREMENTS :

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 165.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) 4.35 V	3.60 V
OUTPUT LEAKAGE CURRENT	(IOL) 947.NA	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -55.0NA	500.NA
AVERAGE INPUT CURRENT HIGH	(11H) 55.9NA	500.NA
SUPPLY CURRENT	(ICC180) 45.8UA	1 . 00MA
SUPPLY CURRENT	(ICC181) 55.8UA	1.00MA
SUPPLY CURRENT	(ICC280) 205.UA	1.00MA
SUPPLY CURRENT	(ICC281) 198.UA	1.00MA

RCA MWS5001 1K CMOS STATIC RAM OB OCT 77 TEMP: 125 C SN: 5

PAGE 5 UF 5

PASSED GALPAT (WIDE LIMITS)
PASSED NUISE IMMUNITY FUNCTIONAL
PASSED GALPAT (FIGHT LIMIT)

	VC	C = 4.5V	5.0V	5.5V	LIMIT
ADDRESS ACCESS TIME	(TAA)	180.N	150.N	135.N	250.NS
DATA SETUP TIME	(TDS)	20.0N	18.0N	18.0N .	50.0NS
DATA HOLD TIME	(TOH)	16.0N	18.0N	22.0N	50.0NS
WRITE PULSE WIDTH	(TWP)	66.0N	60.0N	54.0N	90.0NS
ADDRESS SETUP TIME	(TAS)	28.0N	26.0N	28.0N	70.0NS
ADDRESS HOLD TIME	(TAH)	-8.00N	-4.00N	2.00N	60.0NS
CE TO WRITE TIME	(TWS)	64.0N	58.0N	50.0N	70.0NS
MIN READ CYCLE TIME	(TRC)	175.N	155.N	145.N	250.NS
MIN WRITE CYCLE PIME	(TWC)	< 92.0N	< 92.0N	< 92.0N	220.NS
OUTPUT ENABLE TIME	(TEN)	34.0N	30.0N	26.0N	60.0NS

DC PARAMETRIC MEASUREMENTS:

	DATA	LIMIT
OUTPUT VOLTAGE LOW	(VOL) 185.MV	400.MV
OUTPUT VOLTAGE HIGH	(VOH) →.32 V	3.60 V
OUTPUT LEAKAGE CURRENT	(IOL) 4.56UA <*	1.00UA
AVERAGE INPUT CURRENT LOW	(IIL) -330.NA	500.NA
AVERAGE INPUT CURRENT HIGH	(IIH) 339.NA	500.NA
SUPPLY CURRENT	(ICC180) 240.UA	1.00MA
SUPPLY CURRENT	(ICC1B1) 274.UA	1.00MA
SUPPLY CURRENT	(ICC280) 421.UA	1.00MA
SUPPLY CURRENT	(ICC281) 372.UA	1.00MA

<* MEASURED VALUE OUTSIDE SPECIFIED LIMITS</p>

AC PARAMETER VERSUS SUPPLY VOLTAGE AND SUPPLY CURRENT VERSUS CYCLE TIME

PRICE BLOOK NOT FILMED

PASSED GALPAT (WIDE LIMITS)

VCC VS. ADDRESS ACCESS TIME

	50		150		250		350		450	550
	•	•	•	•	•	•	•	•	•	•
4.50			*							
4.60			*							
4.70			*							
4.80			*							
4.90			*							
5.00			*							
5.10			#							
5.20			*							
5.30			*							
5.40			*							
5.50		*								

VCC VS. DATA SETUP TIME

• • • • • • •	
4.50 *	
4_60 *	
4.70 *	
4.80 *	
4.90 *	
5.00 *	
5.10 *	
5.20 *	
5.30 *	
5.40 *	
5.50 +	

VCC VS. DATA HOLD TIME

	0		20		40
	7	•	ŧ	1	•
4.50			*		
4.60			*		
4.70			*		
4.80			*		
4.90			*		
5.00			*		
5.10			*		
5.20			*		
5.30			*		
5.40			*		
5.50			*		

P4. H - W4351	J	t t. 406 51	wirf. Desc	10 ()		ICME -	25	14.7	
							PAGE:	2 UF	12
vcc vs.	WRITE	PULSE w	IDTH						
	20	40	60		80	100	120		
	1	, ,		•	•	+ +	1 1		
4.50		*							
4.60		*							
4.70		*							
4.80		*							
4.90		*							
5.00		*							
5.10		*							
5.20		*						•	
5.30		*							
5.40		*							
5.50		*							
VCC VS.	ADDRF	SS SETUP	TIME						
	0	20	40		60	80	100		
	i	1 1	1 1	i	•	• • • • • • • • • • • • • • • • • • •	1 1		
4.50		*			•				
4.60		*							
4.70		*							
4.80		*							
4.90		*							
5.00		*							
5.10		*							
5.20		*							
5.30		*							
5.40		*							
5.50		*							
vcc vs.	ADDRE	SS HOLD	TIME						
	-20	o	20		40	60			
	1	, ,	+ +	•	•				
4.50		*							
4.60		*							
4.70		*							
4.80		*							
4.90		*							
5.00		*							
5.10		*							
5.20		*							
5.30		*							
5.40		* .							
5.50		*							

1K CMOS STATIC RAM 10 DCT 77

TEMP =

25

SN:

RCA 4*85001

3 OF 12 PAGE: VCC **VS.** CE TO WRITE TIME 10 30 50 70 90 4.50 4.60 4.10 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC VS. MIN READ CYCLE TIME 80 180 280 380 480 580 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC OUTPUR ENABLE TIME VS. 20 40 60 80 100 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40

10 OCT 77

TEMP =

25

SN:

1

RCA MWS5001

5.50

TK CMOS STATIC RAM

PAGE: 4 OF 12

ICC VS. CYCLE TIME

0 10 20 1 1 1 1 1 100.N * 200.N * 300.N * 400.N * 500.N * 700.N * 800.N * 900.N * 1.00U *

```
RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = -55
                                                            SN:
                                                      PAGE: 5 UF 12
  PASSED GALPAT (WIDE LIMITS)
  VCC VS.
           ADDRESS ACCESS TIME
                                350
                   150 250
           50
                   150
                                                450
                                                         550
    4.50
    4.60
    4.70
    4.80
    4.90
    5.00
    5.10
    5.20
    5.30
    5.40
    5.50
  VCC VS.
          DATA SETUP TIME
                    20
                            40
    4.50
    4.60
    4.70
    4.80
    4.90
    5.00
    5.10
    5.20
```

VCC VS. DATA HOLD TIME

5.30 5.40 5.50

	0		20		40
	•	•	•	•	•
4.50			*		
4.60			•		
4.70			4		
4.80			*		
4.90			*		
5.00			*		
5.10			#		
5.20			*		
5.30			*		
5.40			*		
5.50			*		

```
RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77
                                                  TEMP =
                                                           -55
                                                             PAGE:
                                                                      6 UF 12
VCC
    VS.
         WRITE PULSE WIDTH
          20
                     40
                                60
                                           80
                                                     100
                                                                120
  4.50
  4.50
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
           ADDRESS SETUP TIME
                     20
           \mathbf{o}
                                40
                                           60
                                                      80
                                                                100
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
   VS.
           ADDRESS HOLD TIME
        -20
                                20
                                                      60
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
```

SN:

5.40 5.50 RCA MWS5001 1K CMUS STATIC RAM 10 OCT 77 TEMP = -55 SN: 7 UF 12 PAGE: CE TO WRITE TIME VCC VS. ţθ 30 50 70 90 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 MIN READ CYCLE TIME VCC VS. 380 80 180 280 480 580 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC Vs. OUTPUT ENABLE TIME 0 20 40 60 80 100 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20

1

5.30 5.40 5.50

PAGE: 8 UF 12

ICC VS. CYCLE TIME

0 10 20 1 100.N * 200.N * 300.N * 400.N * 500.N * 600.N * 700.N * 800.N *

```
RC4 MW85001 1K CMOS STATIC RAM 10 OCT 77 TEMP = 125
                                                                SN:
                                                          PAGE:
                                                                  9 UF 12
PASSED GALPAT (WIDE LIMITS)
vcc vs.
         ADDRESS ACCESS TIME
         50
                   150
                             250
                                        350
                                                   450
                                                             550
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          DATA SETUP TIME
                    20
                              40
          0
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
vcc vs.
          DATA HOLD TIME
                    20
                              40
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
```

1 4

5.10 5.20 5.30 5.40 5.50

```
RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77
                                                  TEMP =
                                                          125
                                                                   SN:
                                                                           1
                                                             PAGE:
                                                                    10 OF 12
VCC
     VS.
           WRITE PULSE WINTH
          20
                     40
                                60
                                           80
                                                     100
                                                                120
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
           ADDRESS SETUP TIME
           0
                     20
                               40
                                           ь0
                                                      80
                                                                100
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          ADDRESS HOLD TIME
        -20
                               20
                                          40
                                                     60
  4.50
  4.60
  4.70
  4.80
  4.90
 5.00
 5.10
 5.20
```

5.30 5.40 5.50

```
RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77
                                                TEMP = 125
                                                                  SN:
                                                           PAGE: 11 UF 12
VCC
     VS. CE TO WRITE TIME
         10
                    30
                               50
                                          70
                                                     90
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          MIN READ CYCLE TIME
         80
                   180
                              280
                                         380
                                                    480
                                                              580
 4.50
  4.60
  4.70
 4.80
 4.90
 5.00
 5.10
 5.20
 5.30
 5.40
 5.50
VCC VS.
          DUTPUT ENABLE TIME
          n
                    20
                               40
                                          60
                                                    80
                                                              100
 4.50
 4.60
 4.70
 4.80
 4.90
 5.00
 5.10
 5.20
 5.30
 5.40
```

5.50

RCA MWS5001 1K CMDS STATIC RAM 10 OCT 77 TEMP = 125 SN: 1

PAGE: 12 OF 12

TCC VS. CYCLE TIME

	0		10		20
	•	•		•	•
100.N				*	
200.N			*		
300.N		*			
400.N		1	k		
500_N		*			
600.N		*			
700.N		*			
800.N		*			
900.N		*			
1 - 0.00		*			

RCA MWS5001 1K CMUS STATIC RAM 10 OCT 77 TEMP = 25 SN: 2
PAGE: 1 OF 12

PASSED GALPAT (WIDE LIMITS)

VCC VS. ADDRESS ACCESS TIME

	50		150		250		350		450		550
		•	•	•	•	•	•	•	•	•	•
4.50			*								
4.60			*								
4.70			*								
4.80			*								
4.90			*								
5.00			*								
5.10			*								
5.20		*									
5.30		*									
5.40		*									
5.50		*									

VCC VS. DATA SETUP TIME

	Ø		20		40
	•	t	1	•	•
4.50		*			
4.60		*			
4.70		*			
4.80		*			
4.90		*			
5.00		*			
5.10		*			
5.20		*			
5.30		*			
5.40		*			
5.50		*			

VCC VS. DATA HOLD PIME

4.50	40
4.60 * 4.70 * 4.80 * 4.90 * 5.00 * 5.10 * 5.20 *	•
4.70	
4.80 * 4.90 * 5.00 * 5.10 * 5.20 *	
4.90 * 5.00 * 5.10 * 5.20 *	
5.00 * 5.10 * 5.20 *	
5.10 * 5.20 *	
5.20 *	
5.30 *	
5.40 #	
5.50 *	

```
RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77
                                                          25
                                                                  SN:
                                                TEMP =
                                                           PAGE:
                                                                    2 UF 12
VCC VS.
          WRITE PULSE WIDTH
         20
                    40
                               60
                                          80
                                                    100
                                                               120
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          ADDRESS SETUP TIME
                    20
                                          60
                                                     80
                                                              100
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
vcc vs.
           ADDRESS HOLD TIME
        -20
                     0
                               20
                                          40
                                                     60
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
```

5.40 5.50

```
PAGE:
                                                                3 UF 12
VCC VS. CE TO WRITE TIME
                 30
         10
                             50
                                      70
                                                  90
  4.50
  4.60
  4.70
  4.90
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS. MIN READ CYCLE TIME
         80
                  180
                            280
                                     380
                                                 480
                                                           580
 4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
 5.20
  5.30
  5.40
  5.50
VCC VS.
        OUTPUT ENABLE TIME
                   20
                             40
                                      60
                                                 80
                                                           100
 4.50
  4.60
 4.70
 4.80
 4.90
 5.00
 5.10
 5.20
 5.30
 5.40
```

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP =

25

SN:

5.50

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = 25 SN: 2
PAGE: 4 UF 12

TCC VS. CYCLE TIME

	0		10		20
	•	•	•	•	•
100 N				*	
200.N			*		
300.N		*			
400.N		*			
500.N		*			
600.N		*			
700.N		*			
800.N		#			
900.N		*			
1 600		*			

RCA MWS50	01 1	K CMOS	STATIO	CRAM	10 OCT	77	TEMP =	-55	s	N:	2
									GE:		
								PA	U#. T	5 UF	12
PASSED GA	LPAT	(wide	LIMITS	5)						•	
vcc vs.	ADDR	FSS AC	CESS T	TME							
	50	15		250	350)	450		550		
4.50	•		, , ,	•	•)	• •	•	•		
4.60		*	•								
4.70		*									
4 - 90		*									
4.90		*								•	
5.00 5.10		*									
5.20		*									
5.30		*									
5.40		•									
5.50		*									
vcc vs.	DATA	SETUP	TIME								
	0	20		4 ()							
4.50	•	• •	•	•							
4.50 4.60		*									
4.70		*									
4_80		*									
4.90		*									
5.00		*									
5.10 5.20		*									
5.30		*									
5.40		*									
5.50		*			-						
vcc vs.	DATA	наво т	'EME								
	0	20		40							
4.50	•	, ,	•								
4.60		*									
4.70		*									
4.80		*									
4.90		*.									
5.00		*									
5.10 5.20		*	*								
5.30		*									
5.40		•	*								
5.50			*								

```
RCA MWS5001 IK CMOS STATIC RAM 10 OCT 77
                                                 TEMP =
                                                          -55
                                                                   SN:
                                                            PAGE:
                                                                     6 OF 12
VCC
    VS.
          WRITE POLSE WIDTH
          20
                     40
                                60
                                           80
                                                    100
                                                               120
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
    VS.
           ADDRESS SETUP TIME
           0
                     20
                                40
                                          60
                                                     80
                                                               100
  4,50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
           ADDRESS HOLD TIME
                               20
         -20
                                           40
                                                     60
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
```

- [

RCA MWS5	001 1K C	MUS STATE	C RAM	10 OCT	77	TEMP =	-55	SN:	2
							PAGE:	7 4	F 12
vcc vs.	CE IO W	RITE TIME						•	
	10	30	50		70	90			
	- i	•	•	•	•	1 1			
4.50			*						
4.60			*						
4.70			*						
4.80			*						
4.90		*							
5.00		*							
5.10		*							
5.20		*							
5.30		•							
5.40 5.50		.							
J. 70		•							
vcc vs.	MIN REAL	D CYCLE T	TME						
		4.0.2	200	,	0.0	34.0	ŧ o	.1	
	90	180	280	,	80	480	58	•	
4.50									
4.60	*								
4.70	*								
4.80	*								
4.90	*					*			
5.00	*								
5.10	*								
5.20	*								
5.30	*								
5.40	*								
5.50	•								
W46 W6	cata mentam	entale et	u E						
vcc vs.	UOLPUT	ENABLE FI	IT E						
	n	20	4.0		60	80			
	1 1	• •	•	•	•	• •	1	1	
4.50		*							
4.60		*							
4.70		#							
4.80		*							
4.90		*							
5.00		*							
5.10 5.20		*							
5.30		*							
5.40		*						,	
5.50		*							
.,									

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = +55 SN: 2

PAGÉ: 8 UF 12

ICC VS. CYCLE TIME

0 10 20 100.N *
200.N *
360.N *
400.N *
500.N *
600.N *
700.N *
800.N *
1.00U . * RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = 125 SN: 2

PAGE: 9 OF 12

PASSED GALPAT (WIDE LIMITS)

VCC VS. ADDRESS ACCESS TIME

	50		150		250		350		450		550
	•	•	•	•	•	P	•	•	t	•	•
4.50			*								
4.60			4								
4.70			*								
4.80			*								
4.90			*								
5.00			*								
5.10			*								
5.20			*								
5.30			*								
5.40			*								
5.50			*								

VCC VS. DATA SETUP TIME

	ð		20		40
	•	t	•	•	•
4.50			*		
4.60			*		
4.70			*		
4.80			*		
4.90			#		
5.00			*		
5.10			*		
5.20			*		
5.30			*		
5.40			*		
5.50			*		

VCC VS. DATA HOLD TIME

	0		20		4 0
	F	•	•	•	•
4.50			*		
4.60			*		
4.70			*		
4.80			*		
4.90			*		
5.00			*		
5.10			*		
5.20			*		
5.30			*		
5.40				*	
5.50				*	

RCA MWS50	01 1K	CMOS ST	ATTC	RAM	10 00	77	TEN	1P =	125	1	SN:	2
									PA	GE:	10 U	F 12
vcc vs.	WRITE	PULSE W	(DTH								-	
4.50	20	40	•	60 •	•	80	•	100	•	120		
4.60 4.70				*								
4.80 4.90 5.00			*	*								
5.10 5.20			*	t								
5.40 5.40			*						\			
5.50			*									
vcc vs.	ADDRES	SS SETUP	TIME									
	0	20	•	40	•	60	•	80		100		
4.50 4.60		*										
4.70 4.80		*										
4.90 5.00		*										
5.10		*										
5.20		*										
5.30 5.40		*										
5.50		*										
vcc vs.	ADDRES	ss Hold '	ETME		-							
-	20	0	,	20	•	40	·	60				
4.50 4.60		*										
4.70		*										
4.80		*										
4.90 5.00		*										
5.10		*										
5.20		*										
5.30 5.40		*										
5.50		*										
5.70		*										

PAGE: 11 UF 12 VCC VS. CE TO WRITE TIME 10 30 50 70 90 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC VS. MIN READ CYCLE TIME 80 180 280 380 480 580 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC VS. OUTPUT ENABLE TIME 0 20 40 60 8.0 100 4.50 4.60 4.70 4.80 4.90 5.00 5.10

125

TEMP =

2

SN:

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77

5.20 5.30 5.40 5.50

PAGE: 12 UF 12

TCC VS. CYCLE TIME

	0		10		20
	•	•	•	•	•
100.N				*	
200_N			*		
300.N			#		
400.N			*		
500.N		1	k		
600.N			k		
700.N		*	ķ.		
800.N		*			
900.N		*			
1.000		*			

```
RCA MWS5001 1K CMUS STATTC RAM 10 UCT 77
                                               TEMP =
                                                         25
                                                                SN:
                                                          PAGE:
                                                                  1 OF 12
PASSED GALPAT (WIDE LIMITS)
          ADDRESS ACCESS TIME
VCC
   VS.
         50
                   150
                                        350
                             250
                                                   450
                                                             550
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          DATA SETUP TIME
                    20
                              40
 4.50
  4.60
  4.70
  4.80
  4.90
  5.00
 5.10
 5.20
 5.30
 5.40
 5.50
VCC VS.
          DATA HOLD TIME
          0
                    20
                              40
  4.50
  4.60
  4.70
  4 _ RO
  4.90
  5.00
```

5.10 5.20 5.30 5.40 5.50 RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = 25 SN: PAGE: 2 OF 12 VCC VS. WRITE PULSE WIDTH 20 40 60 80 100 120 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC VS. ADDRESS SETUP TIME 0 20 40 60 80 100 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC VS. ADDRESS HOLD TIME -20 0 20 40 60 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20

5.30 5.40 5.50

```
RCA MWS5001 1K CMUS STATIC RAM 10 OCT 77 TEMP =
                                                      25
                                                             SN:
                                                       PAGE:
                                                               3 OF 12
vcc vs.
         CE TO WRITE TIME
               30
         10
                             50
                                      70
                                                90
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS. MIN READ CYCLE TIME
         80
                  180
                            280
                                     380
                                                480
                                                          580
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
         OUTPUT ENABLE TIME
                   20
                             40
                                     60
                                                 80
                                                         100
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
```

5.40

5.50

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = 25 SN: 3

PAGE: 4 UF 12

ICC VS. CYCLE TIME

```
RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = -55
                                                                  SN:
                                                           PAGE:
                                                                    5 UF 12
PASSED GALPAT (WIDE LIMITS)
vcc vs.
           ADDRESS ACCESS TIME
          50
                   150
                              250
                                         350
                                                    450
                                                              550
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5,10
  5.20
  5.30
  5.40
  5.50
VCC
    VS.
           DATA SETUP TIME
                               40
                    20
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
    VS.
           DATA HOLD TIME
                     20
                               40
           0
  4.50
  4.60
  4.70
  4.80
  4.90
```

5.00 5.10 5.20 5.30 5.40 5.50

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = -55 SN: PAGE: 6 UF 12 VCC VS. WRITE PULSE WIDTH 20 40 60 80 100 120 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC VS. ADDRESS SETUP TIME . 80 20 40 60 100 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 YCC VS. ADDRESS HOLD TIME -20 0 20 40 60 4.50 4.60 4.70 4.80 4.90 5.00 5.10

5.20 5.30 5.40 5.50

```
IK CMUS STATIC RAM 10 OCT 77
                                                  TEMP =
                                                                     SN:
                                                                             3
                                                              PAGE:
                                                                       7 UF 12
VCC
      VS.
           CE TO WRITE TIME
          10
                     30
                                50
                                            70
                                                       90
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
     VS.
           MIN READ CYCLE TIME
          80
                    180
                               280
                                           380
                                                      480
                                                                 580
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
     VS.
           OUTPUR ENABLE TIME
                     20
                                40
                                           60
                                                       80
                                                                 100
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5,10
  5.20
  5.30
  5.40
```

RCA MWS5001

; ; ; !

5.50

PAGE: 8 OF 12

ICC VS. CYCLE TIME

	0		10		20
	•	•	•	•	•
100.N				*	
200 - N			*		
300.N		*			
400.N		*			
500.N		*			
600.N		*			
700 - N		*			
800.N		*			
900.N	*				
1 000	*				

HCA MWS50	01 1	CMOS	STATIC	RAM	10 OCT 77	TEMP =	125	SN:	3
							PAGE:	9 UF	12
PASSED GA	LPAT	(WIDE	LIMITS)				-	
vcc vs.	ADDRE	SS AC	CESS TI	ME:					
4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30	50	, 15	*	250 * * * *	*	450	55		
5.40 5.50			*						
vec vs.	DATA	SETUP	TIME						
4.50 4.60 4.70 4.90 5.00 5.10 5.20 5.30 5.40 5.50	0 ,	, 2	0	40	-				
4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50	DATA			40					

 $\left\{ \begin{array}{c} 1 \\ 1 \\ 1 \end{array} \right.$

OF POOR QUALITY

```
RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77
                                                TEMP =
                                                         125
                                                                  SN:
                                                           PAGE:
                                                                  11 OF 12
VCC
   vs.
         CE TO WRITE TIME
         10
                                          70
                                                     90
                    30
                               50
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
 5.40
  5.50
vcc vs.
         MIN READ CYCLE TIME
         80
                   180
                              280
                                         380
                                                    480
                                                               580
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          OUTPUT ENABLE TIME
                    20
                               40
                                          60
                                                     80
                                                               100
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
```

5.40 5.50 RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = 125 SN: 3

PAGE: 12 UF 12

ICC VS. CYCLE TIME

0 10 20 1 1 1 1 1 100.N * 200.N * 300.N * 400.N * 500.N * 500.N * 600.N * 900.N *

RCA MWS50	001	1 K. C.	MOS ST	ATIC	RAM	10 OCT 7	77 1	CEMP =	25	SN:	4
									PAGE:	1	OF 12
PASSED GA	ALPAT	(W	ide fi	MITS)					-	
vcc vs.	ADDI	RESS	ACCES	s ti	ME						
	50	,	150	,	250	350		450	55	0	
4.50	•		*		•		·		·	•	
4.60 4.70		1	*								
4.80			,								
4.90		*									•
5.00 5.10		*									
5.20		*									
5.30		*									
5.40 5.50		*									
		•									
VCC VS.	DAT	SET	rup Tt	ME							
	0	•	20	•	40						
4.50	•	•	*	•	•						
4.60			*								
4.70			*								
4.80 4.90		1	* t								
5.00		•	;								
5.10		4	ř.								
5.20 5.30		4	; :								
5.40		,									
5.50		4	k			-					
vcc vs.	DATA	. нот	ואוז טי	₹.							
	0	•	20	•	40						

	0		20	40
	•	•	•	•
4.50		*		
4.60		*		
4.70		*		
4.80			:	
4.90		*	:	
5.00		*	:	
5.10		*	•	
5.20		*	•	
5.30			*	
5.40			*	
5.50			*	

```
PAGE:
                                                                     2 UF 12
VCC
    VS.
           WRITE PULSE WIDTH
          20
                     40
                                60
                                           80
                                                     100
                                                                120
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
    VS.
VCC
           ADDRESS SETUP TIME
           0
                     20
                                40
                                                      80
                                                               100
                                           60
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          ADDRESS HOLD TIME
        -20
                      0
                               20
                                                     60
                                           40
 4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
```

TEMP =

25

SN:

PCA MWS5001 1K CMOS STATIC RAM 10 OCT 77

5.40 5.50

RCA	MwS5	001	1 K (MOS	STATIC	RAM	10 0	CT 77	TE	# P =	25	S	N:		4
											PA	GE:	3	0F	12
VCC	vs.	CE	TO (in i te	TIME										
		10	,	30		50	,	70	•	90					
	.50 .60					*									
	70					*									
	80				*										
	.90 .00				*										
	10				*										
5.	20				*									•	
	30 40				*										
	50				*										
vcc	vs.	MIN	I REZ	D CY	CLE TI	ME									
		80	•	180		280	•	380	•	480	1	580			
	50			r.											
	60 70		*												
	80		*												
	90		*												
	.00		*												
	20		*												
5.	30		* •												
	.40 .50		*												
э.	30		T												
vcc	vs.	೧ ២។	rput	ENAR	LE TIM	E	-								
		0	•	20		40	•	60		80	1	100			
4.	50				*			·		·	·	•			
	60				*										
	70 80				*										
	90				*										
5.	00				*										
	10				*										
	20 30			*	* :										
5.	40			*	;										
5.	50			*	:										

PAGE: 4 UF 12

FICE VS. CYCLE TIME

```
RCA MWS5001
             1K CMUS STATIC RAM 10 OCT 77
                                                 TEMP =
                                                                   SN:
                                                            PAGE:
                                                                     5 OF 12
PASSED GALPAT
                (WIDE LIMITS)
VCC
    VS.
           AODRESS ACCESS TIME
          50
                    150
                               250
                                          350
                                                                550
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
    VS.
           DATA SETUP TIME
                     20
                                40
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
     VS.
          DATA HULD TIME
                    20
                               40
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
```

5.20 5.30 5.40 5.50

```
PAGE:
                                                                      6 OF 12
VCC VS.
           WRITE PULSE WIDTH
                                60
          20
                     40
                                           80
                                                     100
                                                                120
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
           ADDRESS SETUP TIME
VCC VS.
                     20
                                40
                                           60
                                                                100
                                                      80
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
           ADDRESS HOLD TIME
                                20
                                           40
                                                      60
         -20
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
```

TEMP =

-55

OF POOR QUALITY

SN:

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77

```
RCA MWS5001
            1K CMUS STATIC RAM 10 OCT 77
                                                TEMP = -55
                                                                 SN:
                                                           PAGE:
                                                                   7 UF 12
VCC
    ٧s.
          CE TO WRITE TIME
         10
                    30
                               50
                                          70
                                                    90
  4.50
  4.60
  4.70
  4.80
  4.90
  5,00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
         MIN READ CYCLE TIME
         80
                   180
                              280
                                        380
                                                   480
                                                              580
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
vcc vs.
          OUTPUR ENABLE TIME
                    20
                               40
                                         60
                                                    80
                                                              100
  4.50
  4.60
  4.70
  4.80
  4.90
 5.00
 5.10
```

5.20 5.30 5.40 5.50 RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = -55 SN: 4

PAGE: 8 UF 12

ICC VS. CYCLE TIME

0 10 20 1 1 1 1 1 1 100.N * 200.N * 300.N * 400.N * 500.N * 600.N * 600.N * 900.N *

```
RCA MWS5001
            1K CMOS STATIC RAM 10 OCT 77
                                             TEMP = 125
                                                               SN:
                                                               9 UF 12
                                                         PAGE:
PASSED GALPAT (WIDE LIMITS)
vcc vs.
         ADDRESS ACCESS TIME
         50
                  150
                             250
                                       350
                                                  450
                                                            550
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
 5.20
 5.30
  5.40
  5.50
VCC VS.
          DATA SETUP TIME
                   20
                              40
          0
  4.50
 4.60
 4.70
  4.80
 4.90
 5.00
 5.10
 5.20
 5.30
 5.40
```

VCC VS. DATA HOGO TIME

5.50

	0		20	40
	•	1	•	t
4.50		4	k	
4.60		1	k	
4.70		4	r	
4.80		4	L	
4.90		4		
5.00			*	
5.10			*	
5.20			*	
5.30			*	
5.40			*	
5.50			*	

RCA NWS5001 1K CMOS STATIC RAM 10 OCT 77 TEMP = 125 SN: PAGE: 10 UF 12 VCC VS. WRITE PULSE WIDTH 20 40 60 80 100 120 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 VCC VS. ADDRESS SETUP TIME 80 0 20 40 60 100 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 ADDRESS HOLD TIME VCC VS. -20 Ù 20 40 60 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20

5.30 5.40 5.50

```
PAGE:
                                                                   11 OF 12
VCC
    VS. CE TO WRITE TIME
                                                      90
                               50
                                           70
          10
                     30
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
vcc vs.
         MIN READ CYCLE TIME
                    180
                                         380
                                                               580
          80
                              280
                                                     480
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          OUTPUT ENABLE TIME
                                                               100
                     20
                               40
                                           60
                                                      80
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
```

TEMP = 125

SN:

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77

5.40 5.50 RCA MWS5001 1K CMGS STATIC RAM 10 QCT 77 TEMP = 125 SN: 4

PAGE: 12 OF 12

ICC	VS.	CYCLE	PIME

	0		10		20
	•	•	•	•	•
100.N				*	
200.N			*		
300.N		4	K .		
400 . N		1	K .		
500.N		*			
600.N		#			
700.N		*			
800 N		*			
900.N		*			
1.000		*			

```
RCA MwS5001
            1K CMOS STATIC PAM 10 OCT 77 TEMP =
                                                        25
                                                               SN:
                                                         PAGE:
                                                                1 OF 12
PASSED GALPAT (WIDE LIMITS)
VCC VS.
         ADDRESS ACCESS TIME
         50
                   150
                             250
                                       350
                                                  450
                                                            550
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          DATA SETUP TIME
          0
                    20
                              40
  4.50
  4.60
  4.70
  4.60
  4.90
  5.00
  5.10
 5.20
 5.30
  5.40
  5.50
VCC VS.
          DATA HOLD TIME
                   20
                              40
 4.50
  4.60
  4.70
  4.80
  4.90
 5.00
 5.10
```

5.20 5.30 5.40 5.50

											PA	GE:	2	υF	12
vcc	vs.	w D T	ም ድ ይህ	LSE W	IATO										
V L. L.	¥	MKI	16 F	IPOF M	7.1711								•		
		20		40		60		80		100		120			
		•	•	1	•	•	•	•	•	•	•	•			
	.50 .60				*										
	, 70				*										
	80				*										
	90			*											
5.	.00			*											
	.10			*											
	, 20			*										•	
	. 30			*											
	. 40 . 50			*											
J,	, a u			•											
VCC	VS.	ADD	PESS	SETUP	TIME	•									
		0		20		40		60		80		100			
		i	ŧ		•	1	•	- 1	•	•		100			
	.50			*											
4.	.60			*											
	70			*											
	80			*											
	90			*											
	.00			*											
	. 20			*											
	30			*											
	40			*											
	50			*											
vcc	vs.	Anna	urce	HOFD	T T M C'										
¥ V. V.	٧٥.	MOUT	Nr.ag	សហគិត	r Tuis?		**								
		~ 20		0		20		40		60					
,		•		•	•	•	•	•	٠	•					
4.	50		*												
4.	.60 .70		•	*											
Α.	80			*											
4.	90			*											
5.	00			*											
5.	10			*											
	20			*											
5.	.30			*											
5.	40			*											
5.	50			*											

TEMP =

25

SN:

5

(mar.)

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77

```
PAGE:
                                                                      3 OF 12
VCC
     VS. CE TO WRITE TIME
          10
                     30
                                50
                                           70
                                                      90
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
         MIN READ CYCLE TIME
         80
                    180
                               280
                                          380
                                                     480
                                                                580
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC VS.
          OUTPUT ENABLE TIME
           0
                     20
                                40
                                           60
                                                      8.0
                                                                100
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
```

1K CMOS STATIC RAM 10 OCT 77

TEMP =

25

SN:

PCA MWS5001

RCA MWS5001 1K CMUS STATIC RAM 10 OCT 77 TEMP = 25 SN: 5

PAGE: 4 OF 12

......

ICC VS. CYCLE TIME

0 10 20 100.N * 200.N * 300.N * 400.N * 500.N * 600.N * 700.N * 800.N * 900.N *

```
RCA MWS5001 1K CMOS STATIC RAM 10 0CT 77
                                                  TEMP =
                                                           -55
                                                                    SN:
                                                             PAGE:
                                                                      5 OF 12
PASSED GALPAT
                (WIDE LIMITS)
VCC
     VS.
           ADDRESS ACCESS TIME
          50
                    150
                               250
                                          350
                                                     450
                                                                550
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
     VS.
           DATA SETUP TIME
           0
                     20
                                40
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
    VS.
           DATA HOLD TIME
                     20
           0
                                40
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
```

5.20 5.30 5.40 5.50

```
RCA MWS5001 18 CMOS STATIC RAM 10 OCT 77
                                                 TEMP =
                                                          -55
                                                                   SN:
                                                                           5
                                                            PAGE:
                                                                     6 UF 12
VCC
    vs.
           WRITE PULSE WIDTH
          20
                                60
                                           80
                     40
                                                     100
                                                                120
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC Vs.
           ADDRESS SETUP TIME
           0
                     20
                                40
                                           60
                                                      80
                                                                100
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
 5.40
  5.50
VCC VS.
          ADDRESS HOLD TIME
        -20
                               20
                                          40
                                                      60
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5,10
  5.20
  5.30
```

5.40

```
RCA MWS5001
                1K CMOS STATIC RAM 10 OCT 77
                                                    TEMP =
                                                               PAGE:
                                                                        7 UF 12
   VCC
        vs.
              CE TO WRITE TIME
                                                         90
             10
                        30
                                   50
                                              70
     4.50
4.60
     4.70
     4.80
     4.90
     5.00
     5.10
     5.20
     5.30
     5.40
     5.50
   VCC
       VS.
              MIN READ CYCLE TIME
             80
                      180
                                 280
                                            380
                                                       480
                                                                  580
     4.50
     4.60
     4.70
     4.80
     4.90
     5.00
     5.10
     5.20
     5.30
     5.40
     5.50
   VCC
       VS.
              OUTPUT ENABLE TIME
                                                        80
              0
                        20
                                  40
                                             60
                                                                  100
     4.50
     4.60
     4.70
     4.80
     4.90
     5.00
     5.10
     5.20
     5.30
     5.40
5,50
```

PCA MWS5U01 1K CMOS STATIC RAM 10 OCT 77 TEMP = -55 SN: 5

PAGE: 8 UF 12

ICC VS. CYCLE TIME

6 10 20 100.N *
200.N *
300.N *
400.N *
500.N *
600.N *
700.N *
800.N *
900.N *

```
RCA MWS5001 1K CMBS STATIC RAM 10 OCT 77
                                                   TEMP =
                                                           125
                                                              PAGE:
                                                                      9 UF 12
  PASSED GALPAT (WIDE LIMITS)
VCC 'VS.
             ADDRESS ACCESS TIME
            50
                      150
                                 250
                                           350
                                                      450
                                                                 550
     4.50
     4.60
     4.70
     4.80
     4.90
     5.00
     5.10
     5.20
     5.30
     5.40
     5.50
  VCC VS.
             DATA SETUP TIME
                                  40
             O
                       20
     4.50
     4.60
     4.70
     4.80
     4.90
     5.00
     5.10
    5.20
    5.30
    5.40
    5.50
  VCC
      VS.
             DATA HOLD TIME
                       20
                                 40
    4.50
    4.60
    4.70
    4.80
    4.90
    5.00
    5.10
    5.20
    5.30
    5.40
```

5.50

*****		• • • • •	., (31.71.3)							
	20		40		60	80		100		120
	•	•	•	•	•	•	•	•	•	•
4.50					*					
4.60					*					
4.70					*					
4_80					*					
4.90					*					
5.00					*					
5.10					*					
5.20					ļ.					
5.30					k					
5.40				1	F					

VCC VS. ADDRESS SETUP TIME

5.50

	O		20		40		60	80		100
	•	•	•	•	•	•	•	•	•	•
4.50				*						
4.60				*						
4.70				*						
4.80				*						
4.90				*						
5.00				*						
5.10				*						
5.20				*						
5.30				*						
5.40				*						
5.50				*						

VCC VS. ADDRESS HOLD TIME

	-20		0		20		40		60
	•	•	•	•	•	•	•	+	•
4.50		*							
4.60		*							
4.70		*							
4.80		*							
4.90			*						
5.00			*						
5.10			*						
5.20			*						
5.30			*						
5.40			*						
5.50			*						

```
RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77
                                                           PAGE:
                                                                   11 OF 12
VCC
     VS.
         CE TO WRITE TIME
                    30
                                          70
         10
                               50
                                                     90
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  3.50
VCC VS.
         MIN READ CYCLE TIME
         80
                   180
                              280
                                         380
                                                    480
                                                              580
  4.50
  4.60
 4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
  5.40
  5.50
VCC
   VS.
          OUTPUT ENABLE TIME
                    20
                                                              100
                               40
                                          60
                                                     80
  4.50
  4.60
  4.70
  4.80
  4.90
  5.00
  5.10
  5.20
  5.30
 5.40
```

TEMP =

125

SN:

5.50

PCA MWS5001 1K CMUS STATIC RAM 10 OCT 77 TEMP = 125 SN: 5

PAGE: 12 UF 12

ICC VS. CYCLE TIME

	0		10		20
	•	1	•	•	•
100.N			*		
200.N			*		
300.N		*			
400.N		*			
500.N		*			
600.N		*			
700.N		*			
800.N		*			
900.N		*			
1.000		*			

AC PARAMETER VERSUS TEMPERATURE

RCA MW	\$ 50 01	1 K	CMOS	STATIC	RAM		10 0	СТ 77	s	N :	1
VCC =	5.00 V								PAGE	1 €	F 5
PASSED	GALPAT			IMÍTS) ACCESS	TIME		٧ s.	TEMPERATURE			
	50		100		50		200				
	•	•	•	•	•	•	•				
-55				*							
- 35				*							
-15		•		*							
5				*							
25				*							
45				*							
65				*							
85				*							
105				*							
105				-	•						

		WRI	TE PU	LSE	HTOTH	VS.	TEM	PERA	TURE
	20		40		60		80		100
	•	•	1	•	•	ŧ	1	•	
-55			*						
-35			*						
-15			*						
5			*						
25			*						
45			*						
65			*						
95			*						
105				*					
125				*					

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 SN: 1

VCC = 5.00 V PAGE 2 OF 5

DATA SETUP TIME VS. TEMPERATURE

	-20		o		20		40		60
	•	•	•	•	•	•	•	+	•
-55				*					
-35				*					
-15				*					
5				*					
25				4	k				
45				4	k				
65					ķ .				
85					*				
105				.4	¥				
125					k				

DATA HOLD TIME VS. TEMPERATURE

	0	20		40
	ŀ	1	•	70
-55		*		
-35		*		
-15		*		
5		*		
25		*		
45		*		
65		*		
85		*		
105		*		
125		*		

RCA	MWS5001	1K CMUS	STATIC	RAM 1	O OCT	77	S	N:	1
vec	= 5.00 V						PAGE	3 06	5

ADDRESS SETUP TIME VS. TEMPERATURE 0 20 40 60 -55 * -15 * -15 * -5 * -17 * -18 * -19 * -1

The second secon

		Añe	RESS	ного	TIME	VS.	TEMPERATURE
	-20		0		20		40
	•	•	•	•	•	•	ŧ
-55			*				
-35			*				
-15			*				
5			*				
25			*				
45			*				
65			*				
85			#				
105			*				
125			*				

VCC = 5.00 V PAGE 4 UF 5

		CHI	P ENA	BLE '	TO WEI	TE TI	ME	vs.	TEMPERATURE
	20		40		60		80		100
	•	•	•	•	•	t	1	•	•
-55			*						
-35			*						
-15			*						
5			*						
25			#						
45			*						
65			*						
85			*						
105				*					
125				*					

		MIN READ	CYCLE 1	TIME	vs.	TEMPERATURE	
	100	120	140)	160	180	200
	P .	1 1				1 1	
-55		*					
-35		*					
-15		*					
5		*					
25			*				
45			*				
65			*				
85			4	k			
105				*			
125					*		

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 SN: 1

VCC = 5.00 V PAGE 5 OF 5

OUTPUT ENABLE TIME VS. TEMPERATURE

0 20 40 60 80 100

*55 *

**55 *

-15 *

5 *

45 *

45 *

65 *

105 *

125

The state of the s

RCA MWSS	5001	1 K C	MOS S	TATIC	RAM		10 00	CT 77	S	N:	2
VCC = 5	5.00 V								PAGE	1 0	F 5
PASSED 0	SALPAT		e lim Ess a	TTS) CCESS	TIME		vs.	TEMPERATURE			
	50	, 1	00	1 !	50	,	200				
~ 55			*								
-35			*								
-15			*								
5			*								
25			*								
45				*							

#RITE PULSE WIDTH VS. PEMPERATURE

20 40 60 80 100

-55 *
-35 *
-15 *
5 *
45 *
45 *
45 *
105 *
105 *
125

RCA	MWS5001	1K CMOS STATIC RAM	10 OCT 77	SN:	2
VCC	= 5.00 V			PAGE 2 OF	5

DATA SETUP TIME VS. TEMPERAT	URF.
------------------------------	------

	-20		0		20		40	60
	•	•	•	•	•	•	•	
-55				*				
-35				*				
-15				*				
5				*				
25				*				
45				*				
65				1	¢			
85				;	#			
105					*			
125					*			

DATA HOLD TIME VS. TEMPERATURE

	Ð		20		40
	•	•	•	•	1
-55			*		
-35			*		
-15			*		
5			*		
25			*		
45			*		
65			*		
95			*		
105			*		
125			*		

*

ADDRESS HOLD TIME VS. TEMPERATURE -20 0 20 40 -55 - 35 -15 - 5 25 45 65 85 105 125

RCA MWS5001 IK CMUS STATIC RAM 10 OCT 77 SN: 2

VCC = 5.00 V PAGE 4 OF 5

CHIP ENABLE TO WRITE TIME VS. TEMPERATURE -55 - 35 -15

MIN READ CYCLE TIME VS. TEMPERATURE -55 - 35 -15 ი5

The second second

RCA MWS5001 1K CMGS STATIC RAM 10 OCT 77 SN: 2

VCC = 5.00 V PAGE 5 OF 5

OUTPUT ENABLE TIME TEMPERATURE VS. 20 40 60 80 100 -55 -35 -15 5 25 45 65 85 105 125

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 SN: 3 VCC = 5.00 VPAGE 1 OF 5 PASSED GALPAT (WIDE LIMITS) ADDRESS ACCESS TIME VS. TEMPERATURE 50 100 150 200 -55 -35 - t 5 - 5 25 45 65

WRITE PULSE WIDTH VS. TEMPERATURE 60 80 100 20 40 -55 -35 -15 5 25 45 65 95 105 125

- 1

RCA	MWS5001	1K CMDS STATIC RAM	10 OCT 77	SN: 3
VCC	= 5.00 V			PAGE 2 OF 5

	рага	SETUP	TIME	vs.	TEMPE	RATU	RE
-20		0	20		40		60
	•	•	• •		1	•	
			*				
			*				
			*				
			*				
			*				
			*				
			*				
			*				
				*			
				*			
		-20	- 20 0	*	-20 0 20 ** * * * * * * * * * *	-70 0 20 40 · · · · · · · · · · · · · · · · · ·	-70 0 20 40 · · · · · · · · · · · · · · · · · ·

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 SN: 3

VCC = 5.00 V PAGE 3 UF 5

+55 -35

+35 +15 -15 -25 -45 -45 -45 -45 -105 -125

VCC = 5.00 V

-55 -35 -15 -5 25 45 65 20

PAGE 4 OF 5

SNI

CH	IP ENA	18 LIE 1	CO WHO	TE TI	IWE	VS.	TEMPERA	TURE
	40		60		80		100	
•	•	•	•	•	•	•	•	
		*						
		*						
		*						

85 * 105 * 125 * *

MIN READ CYCLE TIME VS. TEMPERATUPE

	100	120 140			160		180		200		
	t	•	ı	•	1	•	•	•	•	1	•
- 55					*						
-35						*					
-15					*						
5						*					
25						*					
45							*				
65								*			
45									*		
105									*		
125											*

PCA MW85001 1K CMOS STATIC RAM 10 UCT 77 SN: 3

VCC = 5.00 V PAGE 5 UF 5

O 20 40 60 80 100
-55 *
-35 *
-15 *
5 *
25 *
45 65 *
85 105 *
125 *

RCA	MWS5001	IK CMOS STATIC R	AM 10 OCT 77	St	V :		4
VCC	# 5.00 V			PAGE	1	0F	5

PASSED GALPAT (WIDE LIMITS)
ADDRESS ACCESS TIME VS. TEMPERATURE

	50	1	00 150		200	
	•	•		•	•	•
-55			*			
- 35			*			
-15			*			
5			*			
25	*					
45	*					
65	*					
8.5	#					
105			*			
125				*		

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 SN: VCC = 5.00 V PAGE 2 OF 5 DATA SETUP TIME VS. TEMPERATURE 0 20 40 60 -20 -55 - 35 -15 5 25 45 65 85 105 125 DATA HOLD TIME VS. TEMPERATURE 20 0

0 20 40 -55 * -35 * -15 * 5 * 25 * 45 * 65 * 105 * 125 * RCA MWS5001 1K CMGS STATIC RAM 10 0CT 77 SN: 4

VCC = 5.00 V PAGE 3 UF 5

	ADD	RESS	SETUP	TIME	vs.	. 1	EMPERATURE
0		20		40		60	
•	•		ı	•	•	•	
		*					
	*						
		*					
		*					
		*					
		*					
		*					
		*			•		
		*					
		*					
	0	0	0 20 • • • • • • •	0 20 * * *	* * * * * * *	0 20 40	0 20 40 60 * * * * * * * *

		ADD	RESS	HOFD	TIME	vs.	TEMPERATURE
	-20		0		20		40
	•	•	•	•	•		•
-55			*				
-35			*				
-15			*				
5			*				
25			*				
45			*				
65			*				
85			*				
105			*				
125			*				

RCA MWS5001 IK CMUS STATIC RAM 10 OCT 77 SN: VCC = 5.00 VPAGE 4 UF 5 TY USE STATE CHIP ENABLE TO WRITE TIME VS. TEMPERATURE 60 80 20 40 100 -55 -35 A COLUMN -15 - 5 25 45 65 85 105 125 MIN READ CYCLE TIME VS. TEMPERATURE 120 100 140 180 200 160 -55 - 35 25 45 65 85

105 125

RCA MW85001 1K CMOS STATIC RAM 10 OCT 77 SN: 4

VCC = 5.00 V PAGE 5 OF 5

OUTPUT ENABLE TIME VS. TEMPERATURE -55 -35 -15

```
1K CMOS STATIC RAM 10 OCT 77
  RCA MWS5001
                                                             SN:
                                                                    5
  VCC = 5.00 V
                                                         PAGE 1 UF 5
  PASSED GALPAT (WIDE LIMITS)
                 ADDRESS ACCESS TIME
                                      VS. TEMPERATURE
100
                                     200
           50
                             150
    -55
    -35
     -15
     5
     25
     45
     65
     85
    105
    125
```

WRITE PULSE WIDTH VS. TEMPERATURE 100 20 40 60 80 -55 - 35 -15 4 25 45 65 85 105 125

RCA MWS5001 1K CMUS STATIC RAM 10 OCT 77 SN: 5

VCC = 5.00 V PAGE 2 UF 5

DATA SETUP TIME VS. TEMPERATURE 40 -20 60 20 -55 -35 -15 5 25 45 65 85 105 125

DATA HOLD TIME VS. TEMPERATURE

RCA MWS5001 1K CMOS STATIC RAM 10 OCT 77 SN: VCC = 5.00 V PAGE 3 UF 5 ADDRESS SETUP TIME VS. TEMPERATURE 0 20 40 60 -55 -35 -15 5 25 45 65 85 105 125

-20 0 20 40 -55 *
-35 *
-15 *
5 *
25 *
45 *
45 *
65 *
86 *
105 *
125 * VCC = 5.00 V PAGE 4 OF 5

		CHI	P ENA	BLE :	TO WRI	TE TI	ME	vs.	TEMPERATUPE
	20		40		60		80		100
	•	1	•	•	•	•	•	•	•
+55			*						
-35			*						
-15			*						
5			*						
25			*						
45			*						
65				*					
85				*					
105					*				
125					*				

		MIN	REAU	CACE	e Time		vs.	Thimbs	CRATURE		
	100		120		140		160		18,0		200
	ı	•	•	•	•	•	ŧ		Ťŧ	•	
-55			*								
-35		1	*								
-15			*								
5			*								
25				*							
45				*							
65					*						
85					*						
105					*						
125							*				

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And Antista di ser di damenta di Santa de Santa se di Santa de Santa de Santa de Santa de Santa de Santa de Sa			5.00 V	IK CMOS STATIC RAM 10 0	CT //	SN: PAGE 5 OF	5 5
Marie son visite	Park a same of			DUTPUT ENABLE TIME VS.	TEMPERATURE		
		→ 55	0	20 40 60		100	
Walter St. Committee of		-35 -15 5		* *			
in in agent 2. Societation of		25 45 65		*			
t des est des des consister de la citat de sérvice de la consiste de la consiste de la consiste de la consiste As		85 105 125		*			
esta de la companya del la companya de la companya							
Park Tarak	{						

SCHMOO PLOTS

(DATA SETUP TIME VERSUS WRITE PULSE WIDTH AND DATA HOLD TIME VERSUS WRITE PULSE WIDTH)

```
TEMP =
         25 C
                       VCC = 4.50 V
PASSED GALPAT
               (WIDE LIMITS)
         DATA SETUP VS. WE PULSE WIDTH
                    50
   30
   35
   40
   45
   50
   55
   60
   65
   70
   75
   80
         DATA HOLD VS. WE PULSE WIDTH
                    50
   30
   35
   40
   45
   50
   55
   60
   65
   70
   75
   80
  URIGINAL PAGE IS
  OF POOR QUALITY
                                        PRECEDER PAGE PLACE BOT FLACT
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RCA MWS5001 1K CMOS STATIC RAM 16 MAR 78

TEMP = 25 C

VCC = 5.00 V

PASSED GALPAT (WIDE LIMITS)

DATA SETUP VS. WE PULSE WIDTH

	2		20		40
	•	•	•	•	•
30					
35					
40			***	****	**
45			*****	****	**
50			*****	****	**
55			****	****	**
50			***	****	**
65			****	****	**
70			***	****	**
75			***	****	**
80			****	****	**

DATA HOLD VS. WE PULSE WIDTH

2 20 40

	A Company of the Comp		Selection of the select
RCA MWS500	01 1K CMOS	STATIC RAM	16 MAR 78
TEMP	25 C	vcc = 5.50	٧
PASSED GAL	LPAT (WIDE	LIMITS)	
į.	DATA SETUP	VS. WE PULSE	E WIDTH
	ø , 2		
30			
35		****	
40 45	***	******	
50	**	******	
55 60		******	
65	*	******	
70 75	*	******	
80		****	
1	DATA HOLD	VS. WE PULSE	WIDTH
	g 2	0 40	
30			
35			
4 Ø 4 S	*****	******	
50		****	
55		*****	
50 65		******	
70		*****	
75		*****	
80	*****	****	

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```
RCA MWS5001 1K CMOS STATIC RAM 16 MAR 78

TEMP = -55 C VCC = 5.00 V
```

SN:

PASSED GALPAT (WIDE LIMITS)

DATA SETUP VS. WE PULSE WIDTH

	9				2	0									4	Ø
30																
35			*		*	*	*		*	*		*		*	*	
40		*		*	*	*	*	*	*	*	*	*	*	*	*	
45			*	*	*	*	*	*	*	*	×	*	*	*	*	
50		ď	*	*	*	*	*	*	*	*	*	*	*	*	*	
55			*	*	*	*	*	*	*	*	*	*	*	*	*	
60			*	*	*	*	*	*	*	*	×	*	*	*	*	
65			*	*	*	*	*	*	×	*	*	×	*	*	×	
70			×	*	*	*	*	*	*	*	*	*	*	*	*	
75			×	×	×	*	*	*	×	*	*	*	*	*	*	

DATA HOLD VS. WE PULSE WIDTH

75 80

80

TEMP . -55 C

VCC = 5.50 V

PASSED GALPAT (WIDE LIMITS)

DATA SETUP VS. WE PULSE WIDTH

	2		5	Ø		40
	•	•		•	•	•
30		维!	t	***	* **	* *
35		**	* *	***	***	***
40		* 1	* *	***	***	***
45		*	*	***	***	***
50		*1	* *	***	***	***
55		* 1	*	***	***	***
60		*1	*	***	***	***
65		**	* *	***	***	***
70		*1	*	***	***	***
75		*	*	***	***	***
80		* 1	* *	***	***	***

DATA HOLD VS. WE PULSE WIDTH

	2					5	Ø									4	0
	•		•				•					•					•
30		**	* 1	* *	*	*	*	*	*	*	*	*	*		*	*	
35		**	* 1	* *	*	×	*	*	*	*	*	*	*	*	*	*	
40		* *	* 1	* *	*	*	*	*	×	*	*	*	*	*	*	*	
45		* *	* 1	* *	*	*	*	*	*	*	*	*	*	*	*	*	
50		**	* 1	* *	*	*	*	*	×	×	*	*	×	*	*	*	
55		**	* 1	* *	*	*	*	*	*	*	*	*	*	ŧ	*	*	•
60		**	*1	* *	*	*	*	*	*	*	*	*	*	*	*	*	
55		**	* 1	* *	*	*	*	*	*	*	*	*	*	*	*	*	
70		**	* 1	* *	*	*	*	*	*	*	*	×	*	*	*	*	
75		**	* 1	* *	*	*	*	*	*	*	*	*	*	*	*	*	
80		**	* 1	* *	*	*	*	*	*	*	*	*	*	*	*	*	

GINAL PAGE IS OF POOR QUALITY

```
RCA MWS5001 1K CMOS STATIC RAM 16 MAR 78
                     VCC = 4.50 V
TEMP = 125 C
PASSED GALPAT (WIDE LIMITS)
         DATA SETUP VS. WE PULSE WIDTH
                   50
   30
   35
   40
   45
   50
   55
   50
   65
   70
   75
```

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4

DATA HOLD VS. WE PULSE WIDTH

2 20 40

		fire 10 months to the property	100
		ATIC RAM 16 MAR	78
TEMP = 125 C	VCC	: = 5.50 V	
PASSED GALPAT			
PASSED GALPAT	(MIDE FIL	1113)	
DATA	SETUP VS.	. WE PULSE WIDTH	
0	20	40	
•			
30			
35			
40			
45			
50	***	*****	
55		*****	
50	***	*****	
65	***	*****	
70	****	*****	
75	****	*****	
80	****	*****	
DATA	HOLD VS.	WE PULSE WIDTH	
2	20	40	
•			
30			
35			
40			

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```
RCA MASSOOT 1K CMOS STATIC RAM 16 MAR 78
                                                             SNI
TEMP =
       25 C
                     VCC = 4.50 V
PASSED GALPAT (WIDE LIMITS)
         DATA SETUP VS. WE PULSE WIDTH
   30
   35
   40
   45
   50
   55
   60
   65
   70
   75
   80
         DATA HOLD VS. WE PULSE WIDTH
                    50
   30
   35
   40
   45
   50
   55
   60
   65
   70
   75
```

PASSED GALPAT (WIDE LIMITS) DATA SETUP VS. WE PULSE WIDTH 2 20 40 45 ***************** 50 ************* 50 **********		RCA MWS	5201	1K CMC	S STA	TIC	RAM	16 MAR
DATA SETUP VS. WE PULSE WIOTH 2 20 40 45 ************** 50 ********** 55 **********		TEMP =	25 C		VCC	•	5.00	٧
DATA SETUP VS. WE PULSE WIDTH 2 20 40 35 40 45 50 ************ 50 ********** 60 ********** 70 ********** 75 ********** 80 DATA HOLD VS. WE PULSE WIDTH 2 20 40 45 **************** 50 *****************	Buttered	PASSED	GALPAT	(WIC	E LIM	ITS)	
0 20 40 30 35 40 45 **************** 50 ************	printing and		DATA	96 TH	פע פ	WF	Di 11 9 F	- WTD T H
30 35 40 45 **********************************	Constitution of the consti							. 410111
45		35						
70 70 75 80 DATA HOLD VS. WE PULSE WIDTH 2 20 40 35 40 45 45 50 *************************	Constant of the Constant of th	45 50 55		**	****	***	*** ***	
DATA HOLD VS. WE PULSE WIDTH 2 20 40 30 35 40 45 ***********************************		65 70		•	****	***	***	
DATA HOLD VS. WE PULSE WIDTH 2 20 40 30 35 40 45 ************************************					****	***	***	
30 35 40 45 45 4***********			DATA	HOLD	vs.	WE I	PULSE	WIDTH
35 40 45 *********** 50 ******			2		20			
50 *********		35						
22 **********		5Ø 55		****** *****	*****	***	***	
50 ********** 55 ********* 70 *******		65 70		*****	****	***	***	
75 *********** 80 *********	Section of the sectio							

SNI

-

PASSED GALPAT (WIDE LIMITS)

DATA SETUP VS. WE PULSE WIDTH

	3	a	Ø				4	Ø
30								
35								
40		***	*	***	**	***	*	
45		***	*	***	* *	***	*	
50		**	*	***	* *	***	*	!
55		* *	*	***	**	***	*	
60		**	*	***	* *	***	*	!
65		*	*	***	**	***	*	1
70		*	*	***	**	***	*	
75		*	*	***	* *	***	*	
80			*	***	* *	***	*	

DATA HOLD VS. WE PULSE WIOTH

2		20		40
•	•	•	•	•

nettapa en	RCA N	14858	901	K CMO	S STAT	IC	RAM	16 MAR	78
) olk	TEMP		•55 C		VCC	=	4.50	٧	
The same of									
J	PASSE	D G	LPAT	(WID	E LIMI	TS)			
			DATA	SETUP	vs.	WE	PULS	WIDTH	
			Ø		20		40		
no.			ï	•		•	70		
	30								
	35 46								
	4	3			* *	*	*		
-	56 55			*.	* ***	***	***		
hicari	6			*	*****	***	***		
	6				****				
	70				****				
	8				****				
			DATA	HOLD	VS.	VE F	PULSE	WIDTH	
			_						
			9	G.	50		40		
	3								
	3 ! 4 (
	4		,	* *	* *	*	*		
	5		1	****	****	***	***		
	5 .		,	*****	***	* * * * * * * * * * * * * * * * * * *	***		
	6	5	,	*****	****	***	**		
	7 (7)			*****	****	***	***		
	8		,	****	***	***	***		
8 (

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> ORIGINAL PAGE IS OF POOR QUALITY

SNI

I	RCA MWS	5001 1	K CMOS	STATI	C RAM	16 MAR
4	TEMP =	-55 C		VCC =	5.50	V
	PASSED	GALPAT	(WIDE	LIMIT	'S)	
Contractor of the Contractor o		DATA	SETUP	vs. k	E PULS	E WIDTH
Constitution of the Consti		3	, 2		40	,
Section 2	30 35 40			****		
The contract of	45 50 55 60		***	****** ***** ****	****	
North Control of	65 70 75		***	*****	****	
The second secon	80			****		
Section (Section)		DATA	HOLD	_	PULSE 40	WIDTH
Service and a se	30 35 40	·	*****	- - *****	****	
to the same of	45 50 55		*****	****	****	
And the second	65 70		*****	****	***	
E-control of	75 80		*****			

SNI

TEMP = 125 C

VCC . 4.50 V

PASSED GALPAT (WIDE LIMITS)

DATA SETUP VS. WE PULSE WIDTH

2 20 40

DATA HOLD VS. WE PULSE WIDTH

20 40

I	RCA MWS	55001 1	K CMOS	STATIC	RAM	16 MAR	78	
18	TEMP =	125 C		VCC =	5,00	٧		
	PASSED	GALPAT	(WIDE	LIMITS	,			
1		DATA	SETUP	VS. WE	PULSE	MIDIM		
Constant Con		3	. 2	Ø	40			
Water Section	30 35 40							
Commence of the contract of th	45 50 55			***	***			
П	60 65		**	*****	***			
	7@ 75		**	*****	***			
	80		*	*****	***			
n		DATA	HOLD	VS. WE	PULSE	HTOIW		
parameter		2	. 2	ø .	40			
Sample of the Sa	30 35 40							
And the second	45 50 55		****	******	***			
Г	60 65		*****	*****	***			
gangenic aire	70		*****	*****	***			
	75 80		*****	******	***			

SNS

TEMP = 125 C

30

VCC = 5.50 V

PASSED GALPAT (WIDE LIMITS)

DATA SETUP VS. WE PULSE WIDTH

	0	50	,	40
30				
35				
40 45				
50		***	****	• •
55		****		
50		****	****	**
55		****		
70		****		
75		****		
80		東京東京	***	* *

DATA HOLD VS. WE PULSE WIDTH

3		2 @		40
•	•	•	•	•